

Population and Diversity: Policy Implications of Emerging Indigenous Demographic Trends

J. Taylor

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July 2006

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POPULATION AND DIVERSITY: POLICY IMPLICATIONS OF EMERGING INDIGENOUS DEMOGRAPHIC TRENDS

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ABBREVIATIONS AND ACRONYMS

ABS	Australian Bureau of Statistics
ADM	Argyle Diamond Mine
AGPS	Australian Government Publishing Service
AIHW	Australian Institute of Health and Welfare
ANU	The Australian National University
ASGC	Australian Standard Geographical Classification
ATSIC	Aboriginal and Torres Strait Islander Commission
CAEPR	Centre for Aboriginal Economic Policy Research
CD	Collection District
CDEP	Community Development Employment Projects
CHINS	Community Housing and Infrastructure Needs Survey
FI/FO	fly-in/fly-out
GP	general practitioner
GSP	Gross State Product
HRSCAA	House of Representatives Standing Committee on Aboriginal Affairs
HRSCATSIA	House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs
MCATSIA	Ministerial Council for Aboriginal and Torres Strait Islander Affairs
MER	migration effectiveness ratio
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
SCRGSP	Steering Committee for the Review of Government Service Provision
SD	Statistical Division
SEIFA	Socio-Economic Indexes for Areas
SES	socio-economic status
TAFE	Technical and Further Education

ABSTRACT

There is a compelling need for fresh perspective on the policy implications of Indigenous demographic trends. Current frameworks for considering the structural situation of Indigenous peoples are increasingly focused on State and Territory jurisdictional levels. While this may ease access to data and help determine federal-state responsibilities, it provides little guidance regarding the spatial underpinnings of Indigenous disadvantage. It prevents a view of policy issues and dilemmas in terms of their contextual site and situation. The structural circumstances facing Indigenous populations are increasingly diverse and locationally dispersed leading to variable constraints and opportunities for social and economic participation. The present paper explores key aspects of this diversity by synthesising the findings of recent regional and community demographic studies. The aim is to highlight what, for want of a better term, might be described as emerging demographic 'hot spots' in the sense that particular Indigenous population dynamics in particular regions are giving rise to particular issues of public policy concern. The trends that emerge are seen to spatially align with particular categories of place that transcend State and Territory boundaries and many other areal configurations. They coalesce around particular structural settings (city suburbs, regional towns, town camps, remote Indigenous towns, outstations) as opposed to what has tended to guide Indigenous policy formulation in recent times which has been a changing set of regionalised conceptions. The overriding implication for policy is that whole-of-government approaches need to consolidate around these structural settings so that we have a clear national statement and approach to policy for outstations, with the same for town camps, for growing remote Indigenous towns, for regional country centres, and for poor city neighbourhoods, and that policy directions in regard to these categories involve close collaboration across and between all levels of government. Failure to recognise the implications of demographic trends in these settings may be significant not only in terms of Indigenous well-being but also for social cohesion and a compounding of existing high levels of disadvantage with resultant high downstream costs to governments in addressing the consequences.

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INTRODUCTION

For as long as the census question on Aboriginal and Torres Strait Islander origins remains the primary means of delimiting the Indigenous population, it is likely that the numbers identified in this way will continue to rise owing to a combination of high natural increase, improved enumeration, increased self-identification, and a growing pool of potential identifiers due to the expansionary effects of intermarriage (Gray 1998). Given growing pressures for targeted service delivery that is cost-effective and based on demonstrated need, the prospect of an ever-expanding population is likely to draw increasing scrutiny by policy makers over time. As research on self-identified indigenous populations in the United States has indicated, this poses a paradox for public policy in that indigenous populations are considered discrete and homogeneous when in reality they are likely to become less discrete, less homogeneous and more difficult to define unambiguously (Snipp 1997: 675). Notwithstanding this tendency, several compelling arguments remain for an enhanced focus on the implications of Indigenous demographic trends within the overall analysis of Australian population transformations in the context of current Australian public policy. These can be summarised under the following headings:

Locational: despite national minority status and increasing urbanisation there remains considerable regional diversity of Indigenous representation, such that the demography of large tracts of remote Australia is effectively the demography of Indigenous inhabitants. In particular, it should be recognised that the Indigenous share of the resident outback population continues to rise and many former mission and government settlements are growing to become sizeable country towns.

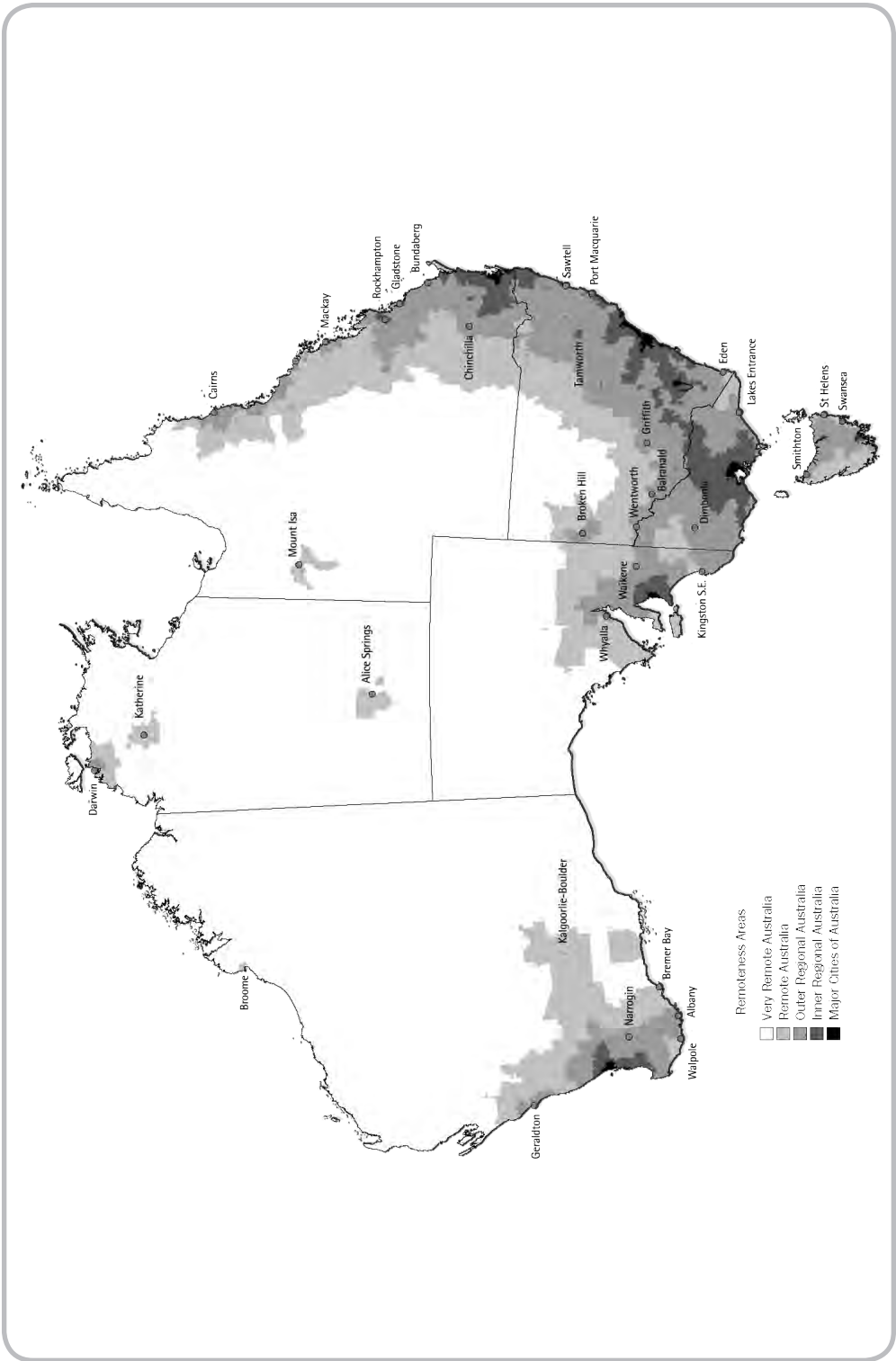
Conceptual: it is clear that the demographic structure and behaviour of the Indigenous population is not simply a subset of the pattern observed overall and that there are unique historical, cultural and structural factors that produce distinct population outcomes.

Social science: while our understanding of population dynamics is slowly increasing, fundamental areas of research remain undeveloped with too few researchers dedicated to this endeavour. In particular there is need for work on the socioeconomic and cultural precedents of demographic transition, on the demographic consequences of intermarriage, and on the sustainability of regional demographic trends. While data quality remains an issue, this is no excuse for inaction.

Social equity and policy: Australian governments proclaim policies aimed at achieving social equity for Indigenous people and improving their socioeconomic well-being. Since the broad parameters for this charter are determined in large part by the size, growth, composition, and changing location of the Indigenous population, then only by accurate monitoring of change in these factors can needs be adequately assessed and resources fairly and equitably distributed.

There is no doubt that Australian governments at all levels are cognisant of the links between social, economic, and demographic change. At the national level, this is evident in attempts to understand the consequences of demographic ageing for the labour market, health care, and national savings. While this

Fig. 1. ASGC Remoteness regions



Source: Taylor 2006.

also has implications for state, territory, and local governments, the concerns here are more often related to the service delivery implications of either rapidly growing or declining regional populations as epitomised by the contrasting fortunes of coastal versus inland areas. Whatever the case, the consequences of population change in determining the number, composition and location of clients of the state (should) lie firmly at the heart of public policy deliberation.

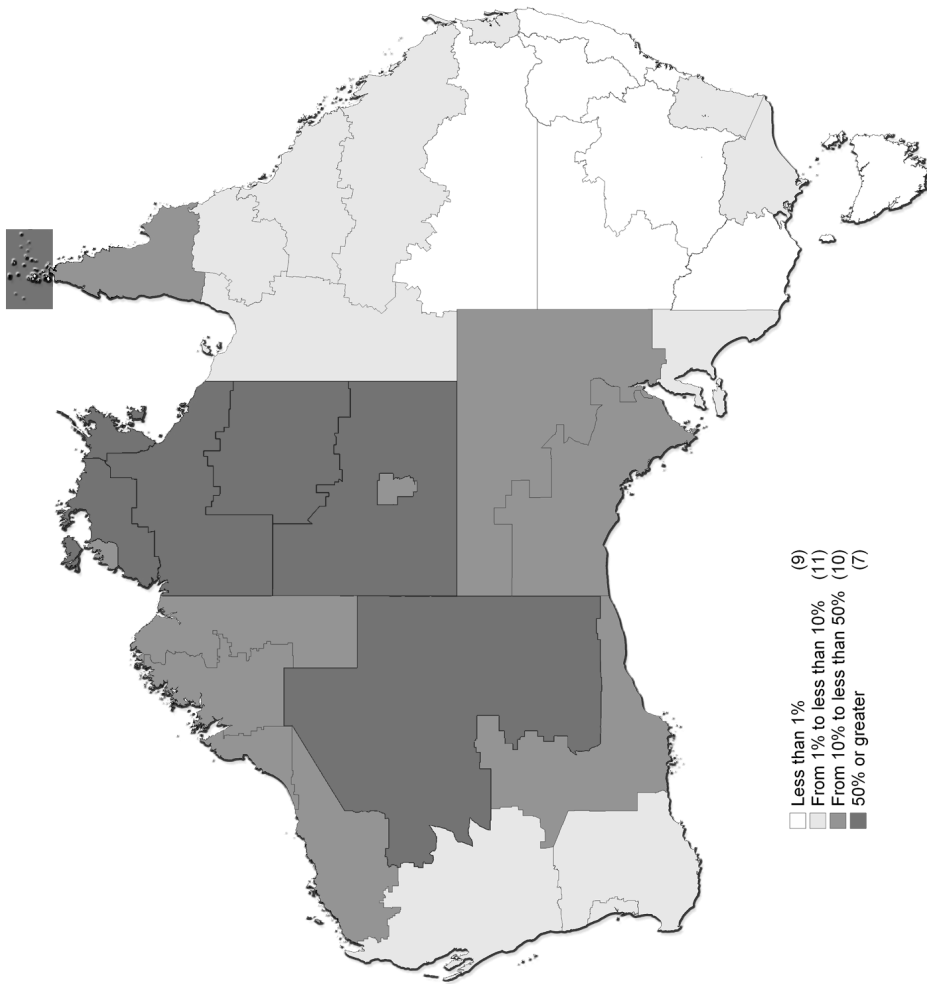
To the extent that this is the case, and for all the reasons outlined above, the implications of demographic transformation should also be a particular consideration for Indigenous public policy as both the preconditions and outcomes of population change for this sub-group are invariably quite distinct from those of the mainstream. While this much is widely acknowledged, with concern routinely expressed about seemingly intractable gaps in life expectancy and in any number of other indicators of socioeconomic status, so far exposure and monitoring of such conditions has been predominantly jurisdictional in nature and focused mostly on states and territories. While this is helpful in easing access to administrative data, and in determining federal-state fiscal responsibilities, it provides little guidance regarding the spatial underpinnings of Indigenous disadvantage, nor does it provide a way of viewing policy issues and dilemmas in terms of their contextual site and situation.

The structural circumstances facing Indigenous communities and policy makers as they attempt to raise living standards are increasingly diverse and locationally dispersed, ranging from the suburbs of global cities to some of the remotest localities on the planet. This, in turn, leads to variable constraints and opportunities for social and economic participation. While adequate portrayal of this diversity remains one of the challenges facing Indigenous social science research, some scope for achieving this is beginning to emerge based on the accumulation of regional and community case studies conducted over the past two decades. The purpose of this paper is to summarise these findings with a view to highlighting the more spatial aspects of Indigenous population dynamics. In particular, the aim is to highlight what, for want of a better term, might be described as demographic 'hot spots' in the sense that particular population dynamics in particular regions give rise to particular issues of public policy concern. Before presenting these case studies, a brief overview of major demographic features of the Indigenous population is provided as essential background.

POPULATION DISTRIBUTION

Of all the changes in Indigenous population over the past 200 years or so, none has been more visible, nor influential, than the geographic shift in distribution. From an original widespread occupancy of the continent with numbers distributed in familial groupings at varying densities, we now see far more clustered residential arrangements focused mostly on the suburbs of towns and major cities. Over the long term, this reflects the impacts of colonisation leading either to rural-urban migration, or to populations in situ being engulfed by expanding urban areas. More recently, since 1971, it has also reflected a growing tendency for Indigenous people who were already urban-based to self-identify in census counts. Either way, the proportion of the Indigenous population resident in urban areas rose from 44 per cent in 1971 to 74 per

Fig. 2. Proportion of Indigenous people who speak an Indigenous language at home by ATSI Region, 2001



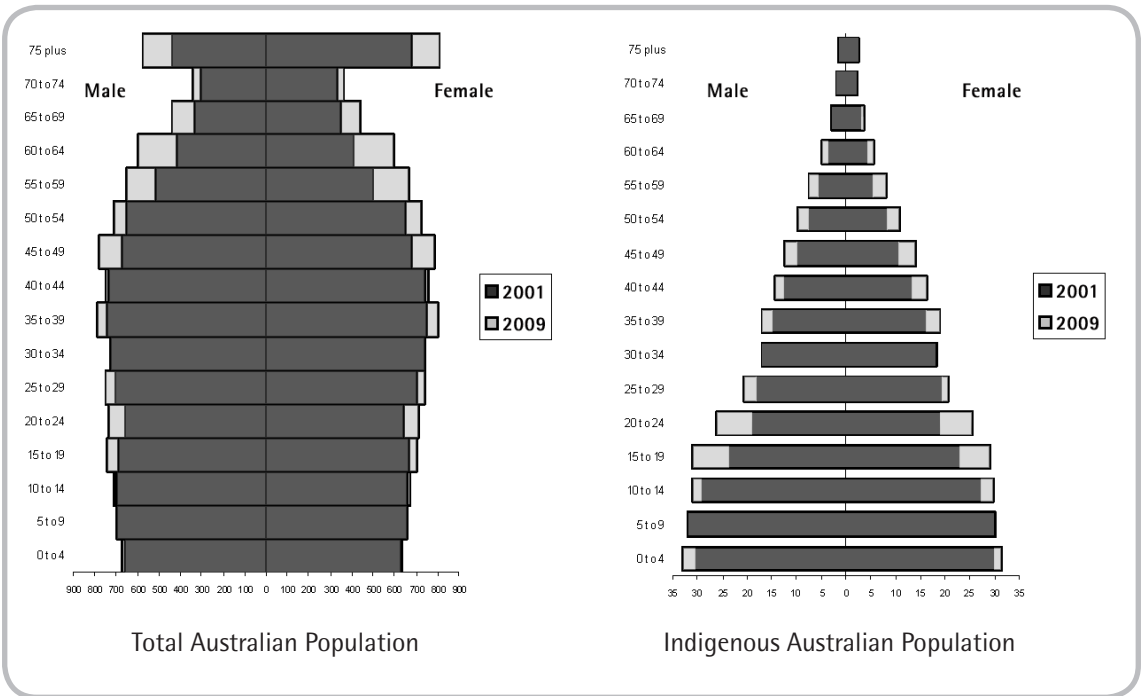
Source: ABS 2001 Census.

Table 1. Indigenous and non-Indigenous population distribution by remoteness category, 2001			
	Non-Indigenous	Indigenous	Indigenous % of total
Major city	12,732,492	138,494	1.1
Inner regional	3,932,907	92,988	2.3
Outer regional	1,907,688	105,875	5.3
Remote	284,160	40,161	12.4
Very remote	97,473	81,002	45.4
Total	18,954,720	458,520	2.4
Source: Australian Bureau of Statistics (ABS) 2003a: 22.			

cent in 2001 ('major city', 'inner regional' and 'outer regional' categories). Almost one-third of Indigenous Australians are now resident in major cities (Table 1). While this remains substantially less than the total population (67%), it nonetheless represents a marked increase from the figure of 15 per cent recorded for major urban areas in 1971. As this process of ever-greater population counts in urban areas has unfolded, the rural share of the population has continued to decline—down from 56 per cent in 1971 to almost one-quarter in 2001 ('remote' and 'very remote' categories).

Despite this shift, the more salient point revealed by Table 1 is that Indigenous people remain far more likely than other Australians to reside away from cities, and especially in remote areas. Reference to remote Australia draws attention to the vast two-thirds of the continent where economic development and access to goods and services are severely impeded by small numbers and long distances. Fully one-quarter of the Indigenous population lives scattered across this landscape in places that are either close to, or on, lands they have owned via descent and other forms of kin-based succession for millennia. Overall, Indigenous people account for almost half (45%) of the resident population of very remote Australia; although away from the main service and mining towns dotted across this vast area, they are by far the majority. As shown by Australian Standard Geographical Classification (ASGC) remoteness regions in Fig. 1, this means that Indigenous people and their institutions predominate over the bulk of the continental land mass.

This dispersal of the contemporary Indigenous population from the suburbs of cities to the remotest parts of the continent produces an unusually diverse range of residential circumstances and opportunities for social and economic participation. If we take just one indicator (the proportion of Indigenous people who speak an Indigenous language at home—see Fig. 2) as a social marker of such diversity, we can see that across the country very different cultural settings apply. In many parts of northern and central Australia, the majority of Indigenous people speak an Indigenous language at home, often as their first tongue. Here, English is just one of a number of secondary languages. Elsewhere, and especially in south-eastern Australia, use of Indigenous languages is almost non-existent.

Fig. 3. Total and Indigenous Australian age pyramids 2001 and 2009

Source: ABS 2004a.

POPULATION SIZE AND COMPOSITION

The other major transformation relates to population size and composition. While estimates vary regarding the size of the Indigenous population in 1788, it is generally accepted that this was no less than 500,000. What is more clear is the trajectory of change since that time. For the next century, this number declined rapidly with the expanding frontier of European occupation, as a consequence of reduced fertility and increased mortality. By 1933 the Indigenous population was estimated to be only 20 per cent of its original estimated size. After a period of stability in low numbers, the years since the 1960s have witnessed a resurgence in population growth due to initial high fertility, reduced infant mortality, and growing identification of Indigenous people in official counts. With the current population estimated to be approaching 500,000 again, this brings us symbolically full circle in terms of original numbers. However, the conditions for further and sustained growth are now very different due to a substantial change in demographic composition and circumstance.

One characteristic that now almost defines the Indigenous population is its composition by age. In Fig. 3, this is compared to the age pyramid of the total Australian population. Both profiles are projected to 2009 to give a sense of how these are changing over time. What is striking is the very young age composition of the

Indigenous population compared to the very old age composition of the Australian population. Moreover, as the latter is projected to age even further with increasing shares in the oldest age groups, the Indigenous population looks set to retain its youthful profile because of large numbers of women moving into child-bearing age, combined with high adult mortality. This reinforces a widening gap in the focus and purpose of social and economic policy—as the Australian population is increasingly concerned with the effects and implications of ageing and funding retirement, Indigenous Australians remain firmly fixed on issues of raising families, education, housing, and jobs.

With this youthful age profile and substantial room for improvement in life expectancy, the Indigenous population is now poised to increase way beyond the estimated numbers present at the onset of colonial settlement. What is more, the pool of descendants of the first Australians will increasingly be added to by births to non-Indigenous mothers and Indigenous fathers as long as these children continue to be identified in official statistics as Indigenous, which the majority now are.

As with the general population, an Indigenous baby boom emerged in the post-war years but was sustained for longer and has persisted at much higher levels leading to substantial population growth since the 1970s. However, in the past two decades, the fertility of Indigenous women has followed the steady decline observed more generally, and though it remains higher than that of all Australian women, it is now also below replacement level. While this has gradually reduced the rate of Indigenous population growth, there are a number of reasons why such growth is likely to remain relatively high for many years to come:

- The youthful age distribution of the Indigenous population means that the cohort of child-bearing women will continue to expand for some time to come.
- Not all Indigenous population growth is attributable to the fertility of Indigenous women. More than two-thirds (68%) of Indigenous couple families are based on unions between Indigenous and non-Indigenous partners. So long as such couples identify their children as Indigenous (and the majority currently do—85%), then there will be a rising and progressively substantial boost to Indigenous population from births to non-Indigenous women with Indigenous male partners. Presently, one-quarter of the growth in the Indigenous population is due to this factor, although this is overwhelmingly in the more urbanised south and east of the country. By contrast, in remote areas, and especially across northern Australia, Indigenous women's fertility remains very high and populations continue to expand rapidly due to natural increase with little contribution from non-Indigenous women (Kinfu & Taylor 2005).
- Indigenous population growth is currently held back by persistently high mortality, especially at adult ages. The scale of this premature loss to the population is such that any shift towards more general levels will lead to enhanced numbers, especially at older ages. At present, about 6 years (or approximately 33–35%) of the 17 year difference in life expectancy between Indigenous and non-Indigenous Australians results from excess mortality among Indigenous Australians in the age group 40–64 years (Kinfu & Taylor 2002). On current indications, this gap appears likely to close only over the long-term.

Clearly, much of the difference in mortality between Indigenous and non-Indigenous Australians—both male and female—results from a sustained high intensity of Indigenous mortality in adult ages. The policy impact of this can be demonstrated by establishing the year in which expectation of life at birth were the same for the total population as they are now for the Indigenous population. Thus, current life expectancies for Indigenous males and females are at a level last seen for all Australian males and females back in 1919 and 1925 respectively.

INDIGENOUS AUSTRALIANS IN AN AGEING POPULATION

The age distribution of future population growth indicated in Fig. 3 reveals a widening dichotomy between the social policy needs of Indigenous and non-Indigenous Australians. That is, while the nation as a whole is focused increasingly on the consequences of an ageing population and therefore in establishing the means to finance and service retirees, most Indigenous people barely reach retirement age, and their concerns are at the opposite end of the social policy spectrum (child health, education, criminal justice—especially in relation to youth—successful transition into the workforce, family housing and establishing the means to commence asset accumulation). Of course, aside from the relatively higher fertility observed for Indigenous women, the main demographic factor leading to this disparity is sustained high Indigenous adult mortality leading to low life expectancy. Not surprisingly, the response to this from governments has been focused largely on health policy. However, there are other economic factors that impinge just as directly on well-being.

Given the links that exist between socioeconomic status and ill health (Berkman & Kawachi 2000), it is to be expected that the poor economic outcomes observed for Indigenous people are in part associated with their relatively high rates of morbidity and mortality. If we take the situation regarding life expectancy alone, the physical limitations on prolonged and full participation in the workforce become all too apparent. If we add to this the fact of relatively high morbidity rates commencing in young adulthood and rising throughout the prime working ages, then a pattern emerges of physical constraints on the ability of many in the Indigenous community to engage in meaningful and sustained economic activity. As an example of the potential scale here, as much as 36 per cent of Indigenous adults in Australia reported having a disability or long term health condition in the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSIS) (ABS 2004b). From a labour market perspective, it is likely that the negative effects of such poor health status commence long before individuals are eligible to join the workforce as suggested by relationships, long-established, between the poor health status of Indigenous people and below average school performance (Lowell 1994). There is also the likelihood of less direct impacts on workforce participation such as the prospect that many individuals do not seek work due to responsibilities in caring for sick relatives.

An attempt to provide some measure of the economic costs of poor health status has been made using data for the Indigenous population of New South Wales (Taylor 2005). The incomplete identification of Indigenous people in hospital, general practitioner (GP), health centre and vital registration data in New South Wales, combined with uncertainties regarding population estimates, makes the precise measurement

Table 2. Potential lost lifetime income due to excess male Indigenous mortality, New South Wales, 2001				
Age interval	Ratio of excess Indigenous mortality	Mean Indigenous income (\$)	Potential lifetime income (\$)	Potential total lifetime income lost (\$)
0–14	3.18		1,282,176	44,847,168
15–24	2.67	13,840	1,282,176	26,792,701
25–34	4.35	23,675	1,094,598	46,470,188
35–44	6.44	24,819	852,127	64,201,210
45–54	5.61	25,494	600,563	50,898,420
55–64	3.92	19,867	373,761	32,013,416
65–74	2.13	13,721	205,821	7,949,388
75+	1.25	13,721	68,607	644,676
Total				273,817,166
Source: Taylor 2005.				

of health status difficult. Notwithstanding this, there are a range of indicators that continue to signify much higher Indigenous morbidity and mortality rates. Thus, three-year average Indigenous infant mortality rates for 2002–02 are almost twice the non-Indigenous rate (9.5 compared to 5.0 per thousand live births) (Steering Committee for the Review of Government Service Provision (SCRGSP) 2005: Table HPA.2). The birthweights of Indigenous babies are almost twice as likely to be low (under 2500g) compared to non-Indigenous birthweights (11.4% compared to 6.2%) (ABS/ Australian Institute of Health and Welfare (AIHW) 2003: 126). Indigenous hospital separation rates are 50 per cent higher than non-Indigenous rates, although generally in line with the Indigenous share of population (ABS/AIHW 2003: 78). All of this, of course, is reflected in the much lower life expectancy at birth of 65 years for Indigenous females, and 60 years for Indigenous males over the period 1996–2001, compared to 83 and 77 years respectively for all Australians (SCRGSP 2005: Table HPA.5).

The relatively poor health status of Indigenous people in New South Wales is unequivocal. What is less clear is the economic impact of this. A range of issues arise. For one thing, the shorter life span means that working life is, on average, curtailed. What this means for career development, family savings and superannuation are moot points as no research has directly addressed these issues. However, one measure that can be attempted, and that begins to place a quantum on health impacts, is an estimate of the total amount of potential life income lost due to premature mortality. For this purpose the methodology applied by Maxim, White and Obeng-Gyimah (2003) is followed.

This is similar to a life table calculation of life expectancy at birth, only with the focus on potential income expectancy under prevailing mortality. It essentially answers the question: what amount of potential lifetime income do Indigenous people forgo because they die sooner than the population in general—in other words, because they were subject to a regime of higher mortality than that experienced by the general population? If we turn to Table 2 for an answer, we can see that the potential lifetime income for Indigenous males in New South Wales aged 0–14 years in 2001 was \$1.2 million. This is the cumulative sum over a lifetime of the average Indigenous male income. However, because Indigenous males in this age group die at a rate that is 3.18 times higher than the Australian average, the total amount of potential income lost is the product of these excess deaths and each potential lifetime income. For those in the youngest age group in 2001 this amounted to \$44 million. The same calculation is made for each age group resulting in an aggregate potential lost income among all males in 2001 of \$273 million. The equivalent calculation for females was \$123 million.

Thus, all other things being equal, if the Indigenous population of New South Wales in 2001 had a mortality profile fixed and equivalent to that of the general population they would have received an additional \$397 million in income over the collective lifetime. This income effect of poor health and associated higher mortality represents no small loss given that the overall estimated gross personal income for the Indigenous population of New South Wales in 2001 was \$1.2 billion (Taylor 2005).

A substantial contributor to the complex of low Indigenous economic status is poor health status and its related outcome of premature mortality. Aside from the lost lifetime income associated with low life expectancy, there are implications also for the accumulation of, and access to, retirement income either through the compulsory superannuation system or via voluntary savings. As Pragnell (2002) points out, higher incidences of poverty and shorter life expectancy may mean that Indigenous workers have a greater need to access their superannuation early to deal with particular financial situations. In support of this, the 2002 NATSISS reported that as much as 54 per cent of Indigenous adults across Australia were unable to raise \$2,000 within a week for something important. This compares to just 14 per cent of all adults (ABS 2004b). However, in Pragnell's (2002) view, the key constraints on retirement savings are associated more with the minimal savings impact of the superannuation guarantee due to low Indigenous occupational status and intermittent work, followed by the fact that those on the basic Community Development Employment Projects (CDEP) wage are not eligible for the guarantee including the automatic death and disability insurance cover that many such schemes provide. With around 35,000 CDEP participants in Australia this constitutes a significant outstanding public policy issue.

The lack of policy attention on the economic implications of Indigenous premature mortality, and on the related savings implications of Indigenous employment conditions, is symptomatic, in a way, of the key structural/demographic differences between the Indigenous and non-Indigenous populations. The demographic and socioeconomic position of Indigenous people has been described as resembling that of the 'Third World in the First' (Young 1995). However, unlike populations in the Third World, the demography of Indigenous groups in Australia is as much an effect of marginalisation in the midst of plenty, as it is to do with

Table 3. Indigenous and non-Indigenous population mobility rates, 1966–2001				
Intercensal period	Indigenous (1)	Non-Indigenous (2)	Total	Ratio (1/2)
1971–1976	46.7	—	40.7	114.7
1976–1981	—	—	40.7	—
1981–1986	—	—	41.2	—
1986–1991	44.6	40.3	40.7	110.7
1991–1996	52.2	42.9	43.0	121.7
1996–2001	50.8	42.2	42.3	120.4
Age standardised				
1986–1991	40.8	40.3	—	101.2
1991–1996	46.9	42.9	—	109.3
1996–2001	42.8	42.2	—	101.4
Source: Taylor 2006.				

any lack of development per se (Gray 1985). In this context, it is interesting to reflect on the establishment of a future fund as a key plank of government response to the problems of an ageing Australia. For many Indigenous Australians, the issue is more that funds are provided now in order for there to be a future.

POPULATION MOBILITY

Successive census results since 1971 indicate that Indigenous people change their usual place of residence at consistently higher rates than the rest of the population. However most of this gap is accounted for by the fact the Indigenous population includes a higher proportion of people in younger, more mobile, age groups. Thus, when Indigenous rates are age-standardised against the total population, the difference in rates is much reduced (Table 3). After accounting for this age difference, it can be seen that almost 43 per cent of the Indigenous population reported a change of residence over the five year period prior to the 2001 Census, a similar intensity of mobility as for the non-Indigenous population. Table 3 also shows that overall levels of mobility were relatively stable from the late 1960s to the mid-1990s when a marked rise in mobility was observed, although this has been attributed to problems in 1996 Census coding and should probably be discounted (Bell & Stratton 1998). As for the Indigenous population, the general trend appears to represent a rise in the mobility rate over time if we set aside the 1996 coding problems and focus on the age-standardised rates. There is a caveat, however.

Because Indigenous classification in census data is a social construct, demographic factors are not solely responsible for intercensal population change. Between 1991 and 1996, for example, as much as half (51%) of the increase in the Indigenous count could not be accounted for by demographic factors (Gray 1997), while the equivalent figure for the last intercensal period was 31 per cent (Kinfu & Taylor 2005). Thus, it is difficult to unequivocally ascribe higher (or lower) mobility in a time series to actual changes in the propensity to move among Indigenous people. In effect, successive census data capture the characteristics, including mobility, of different populations. All that can be said, then, is that the mobility rate among those who identified as Indigenous in 2001 was slightly lower than the rate observed for those recorded as Indigenous in 1996, but substantially higher than those who identified as Indigenous in 1991. While there is some scope for estimating the compositional impact of newcomers to the population using fixed population characteristics (such as age left school), for characteristics that are variable over time (such as mobility status) this is simply not possible. The degree to which Indigenous people are in fact now more (or less) mobile than in the past is therefore beyond analytical reach.

These caveats aside, it can be confidently stated that the number of Indigenous people reporting an intercensal change of residence during the 1990s was substantially higher than in the past. Between 1986 and 1991, a total of 94,167 movers were recorded (45% of the population at risk), whereas 10 years later between 1996 and 2001, 170,830 individuals indicated a change of address (51% of the population). Conversely, a total of 165,627 Indigenous people reported no change in their residential address over the 1996–2001 intercensal period, though this is not to say that they did not necessarily move during that time—simply that if they did, then such movement involved a circuit back to the point of origin and was therefore not measured by the census fixed-period migration question. This issue is worth bearing in mind since it is a common failing of census migration data in the context of frequent short-term Indigenous movement.

Of particular note is that while remote Indigenous peoples are highly mobile, they are far less migratory than elsewhere (Taylor & Bell 2004). As a consequence, across much of the outback the Indigenous population is rising as a share of the total because Indigenous net migration loss from the bush is much lower than that recorded for the non-Indigenous population. In the cities, natural increase of the Indigenous population is much lower than in the bush, but numbers here are rising more rapidly due to increased enumeration and net migration gain (at least in some cities). Demographic outcomes from this mix of broad transformations are increasingly manifest in particular settings, each of which present a different set of challenges for policy. The remainder of this paper details the dynamics and implications of specific examples.

POST-WAR URBANISATION: REAL OR IMAGINED?

Notwithstanding the retention of Indigenous populations in remote areas, one of the more obvious transformations in the second half of the twentieth century has been a shift in the balance of continental geographic distribution away from remote and rural areas in favour of urban and metropolitan centres, and consequently from the north and west to the south and east of the country. Over the longer-term, this

redistribution may be viewed as an outcome of the incorporation of Indigenous people into mainstream society. Over the shorter term (since the 1960s), uncertainty exists as to whether spatial mobility, or ethnic mobility, has been the main contributor to increased urban numbers.

In the 1960s, a series of survey and census-based analyses highlighted what had been perceived as occurring for some time—that the Indigenous population resident in major cities had been growing rapidly due to net migration gains from small towns and rural areas. In an important study based on Adelaide, it was argued that movement from mission and government reserves was stimulated by a search for employment opportunities and the attraction of better social services (Gale & Wundersitz 1982). Once metropolitan links were established, movement out of rural areas was sustained by a process of chain migration involving kin networks. Similar sets of push and pull factors, with particular emphasis on the search for employment, were reported from migrant surveys in other cities (Taylor 1997).

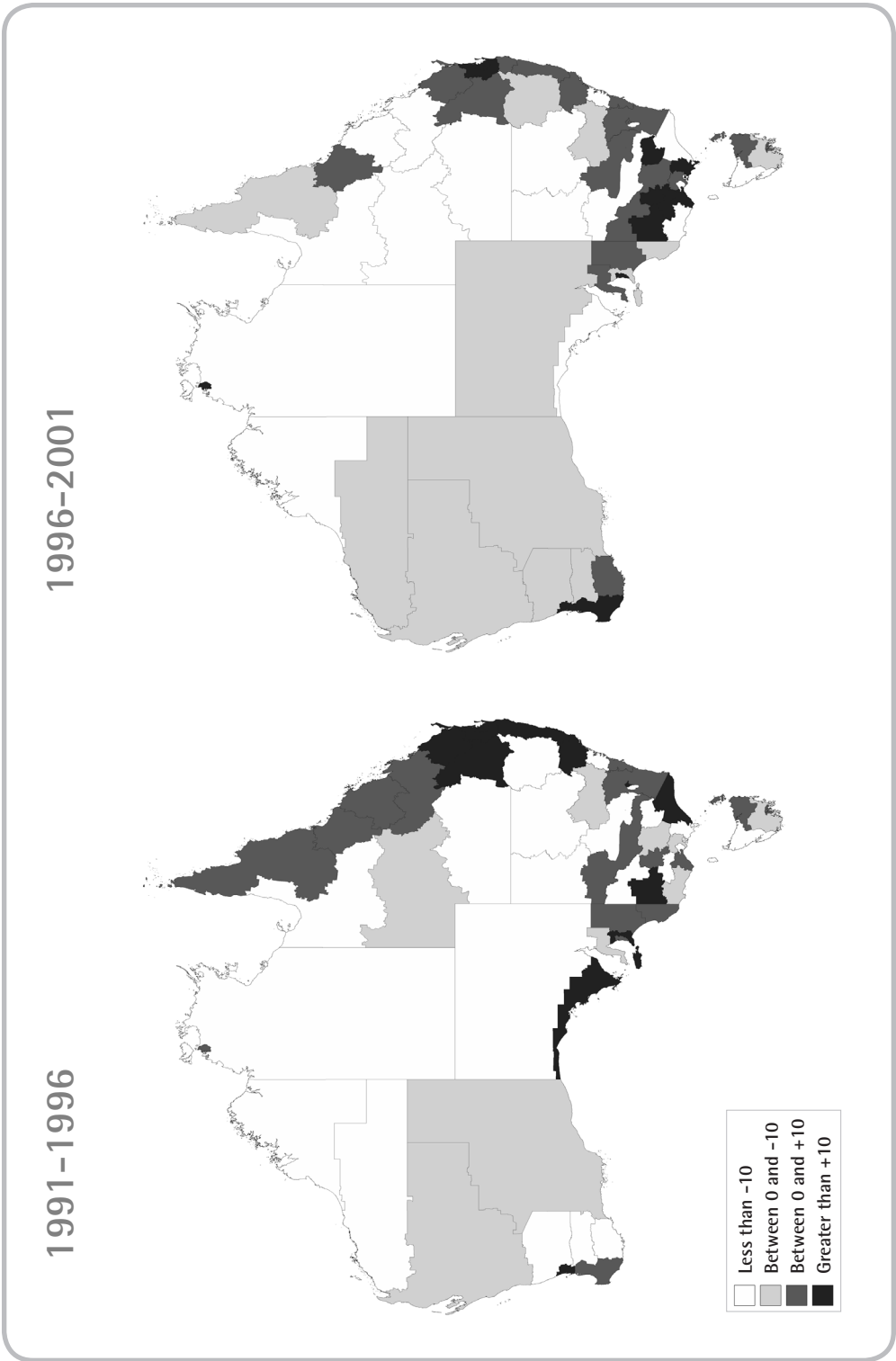
On the face of it, the migration of Indigenous people to towns and cities reported in the 1950s and 1960s, appears to have accelerated in subsequent decades. Thus, at the 1971 Census (the first to include a self-identified Indigenous population in the overall count of the Australian population), 56 per cent of those who declared themselves of Aboriginal or Torres Strait Islander origin were resident in a rural area. At the 2001 Census, this figure was reduced to less than one-quarter. Accordingly, the proportion of the Indigenous population resident in urban areas rose from just 44 per cent in 1971 to 74 per cent in 2001. At the same time, 30 per cent of Indigenous Australians are now resident in major cities, and while this remains considerably less than the total population (63%), it nonetheless represents a substantial growth since 1971.

If anything, these figures understate both the extent and rapid rise in urban numbers, especially in terms of proximity to metropolitan centres and large cities. The criteria used to classify statistical units as urban or rural are based on measures of population density, land use and spatial contiguity. This means that many people who may reasonably be regarded as forming part of a city region are not classified as urban dwellers. By adding peri-urban areas to the calculation, 27 per cent of the Indigenous population was classified as resident in major city regions in 1991. By 1996, this figure had risen to 36 per cent (Taylor 2003a).

A REVISIONIST VIEW

While there is no doubting the steady rise in urban numbers and the empirical evidence pointing to rural out-migration, a revisionist view of this redistribution is available. This regards post-war migration to major cities as only a temporary wave during the 1950s and 1960s and one which ultimately contributed less to Indigenous urban population growth than previously claimed (Gray 1989: 130–33). Suspicion that much of the apparent shift in population distribution since the 1960s could have been due to an increased tendency for city-based Indigenous people to self-identify in census enumerations, as much as to net migration, was first raised by Smith (1980a: 252, 1980b: 202) and later by Gray (1989: 130). This was based on the fact that early studies of Indigenous urbanisation focused solely on flows towards cities with no corresponding statistics on counterstreams of people who may have been leaving metropolitan areas.

Fig. 4. Indigenous migration effectiveness ratios by Statistical Division, 1991–1996 and 1996–2001



Source: Taylor 2006.

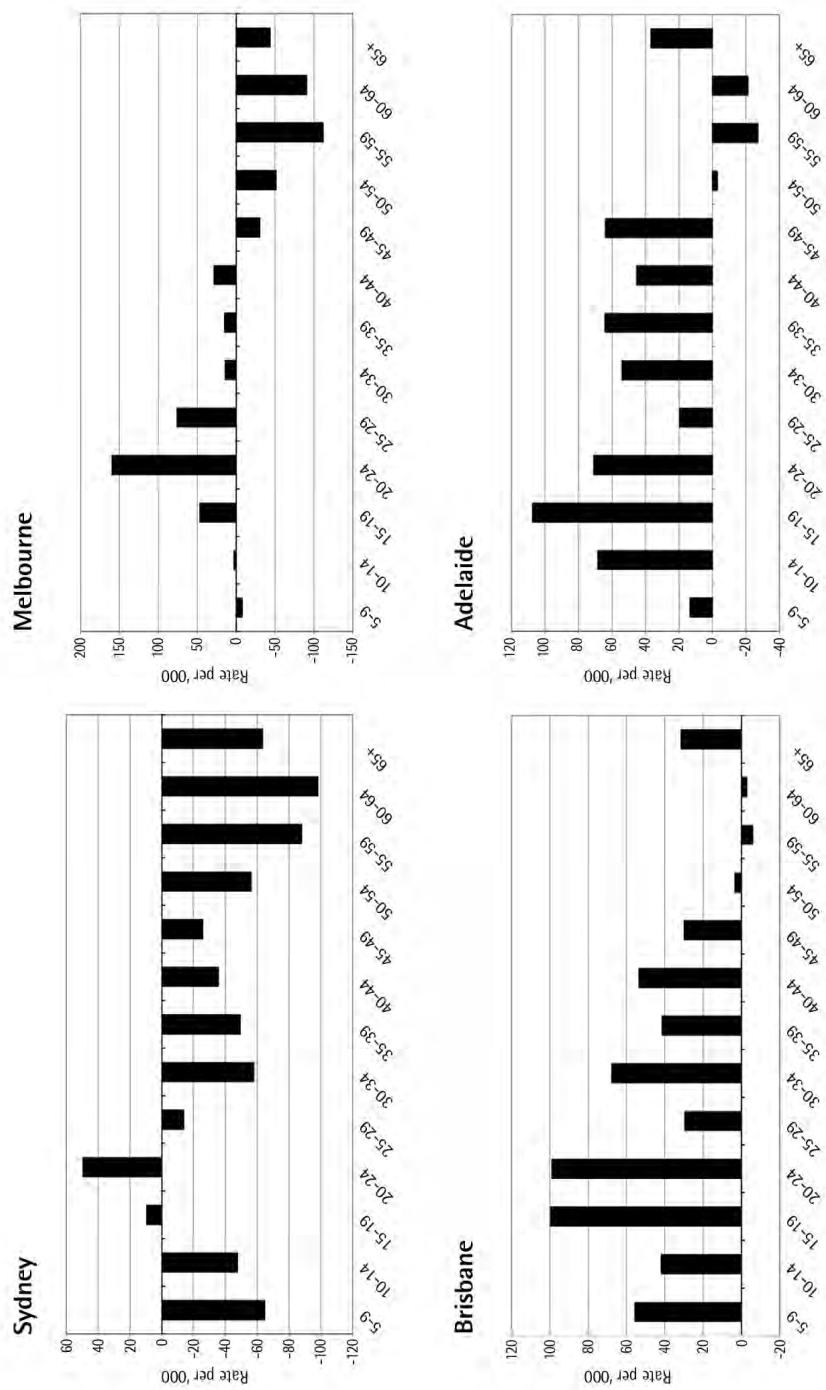
Table 4. Statistical Divisions with high and low Indigenous migration effectiveness ratios, 1996–2001			
Barwon (Vic)	23.6	South West (Qld)	-13.0
Moreton (Qld)	22.5	Western District (Vic)	-13.0
Central Highlands (Vic)	17.1	Murray (NSW)	-13.2
Ovens-Murray (Vic)	16.9	Mackay (Qld)	-13.5
Loddon (Vic)	16.8	Sydney (NSW)	-15.7
Adelaide (SA)	16.8	NT Balance	-21.6
Wimmera (Vic)	16.7	Far West (NSW)	-22.2
Brisbane (Qld)	15.5	North Western (NSW)	-22.3
Gippsland (Vic)	14.2	North West (Qld)	-24.9
Darwin (NT)	12.5	Eyre (SA)	-26.7
Perth (WA)	12.0	Kimberley (WA)	-28.1
South West (WA)	11.8	East Gippsland (Vic)	-29.4
Source: Taylor 2006.			

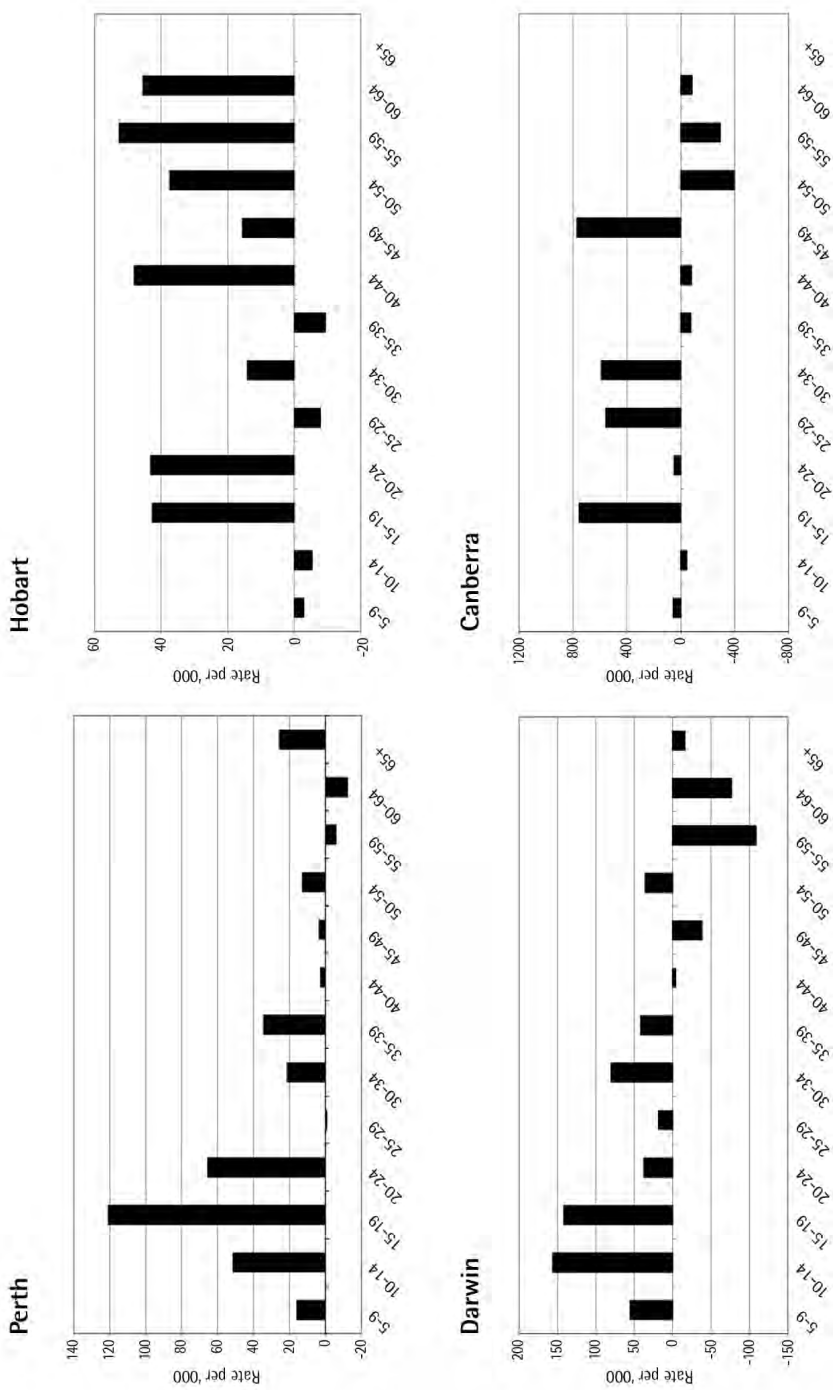
The point is addressed in detail by Gray (1989) who demonstrated emphatically that if migration were ever a major factor leading to an increased Indigenous presence in major cities then, from 1976 onwards, it was far less so. The same point has been acknowledged by Gale and Wundersitz (1982: 96) who noted that movement patterns based on Adelaide were not unidirectional, but included a good deal of movement back out to country areas. They also concluded that migration flows to the city peaked during the 1960s with subsequent growth in urban areas due more to the effects of natural increase (Gale & Wundersitz 1982: 39).

For the contemporary period, Gray (1989) and Taylor and Bell (1996, 1999) have commented on the low overall effectiveness of migration flows between metropolitan and non-metropolitan areas, with the 1996 Census indicating slight overall net gain to capital cities in contrast with the previous intercensal period which showed a slight net loss. However, this aggregate net gain of Indigenous population to capital cities has by no means been uniform. Sydney, for example, has consistently experienced a net loss of Indigenous people to the rest of New South Wales as well as to other states. Melbourne also has recorded net losses of Indigenous population both to the rest of Victoria and to other states. In the other major cities of Brisbane, Adelaide, Perth and Canberra, net migration gains have been consistently recorded. Interestingly, this mirrors the pattern observed for the Australian population as a whole, though for quite different reasons.

The efficiency with which migration acts as a mechanism to redistribute population can be measured by the migration effectiveness ratio (MER). This measure compares the total net gain or loss in a given area to the sum of migration flows in and out of the area (gross migration). The result is normally expressed as a

Fig. 5. Age profile of Indigenous net migration rates, capital cities, 1996–2001





Source: Taylor 2006.

percentage and so can vary between plus or minus 100 depending on the net migration balance. Figure 4 shows the change in Indigenous MERs by Statistical Divisions (SDs) over 1991–1996 and 1996–2001.

While there has been a general lowering of migration effectiveness over the past decade, the overall pattern has remained similar with the highest negative ratios consistently in inland regions and across much of remote Australia, and the highest positive ratios in coastal regions of southern and eastern Australia and in the south west. The actual SDs involved here in the latest intercensal period are listed in Table 4. In terms of regional population loss, these include SDs in the remoter parts of most states and the Northern Territory, as well as (interestingly) Sydney. In terms of population gain, the capital cities of Brisbane, Adelaide, Perth and Darwin have long been net recipients of Indigenous population flows, while metropolitan hinterlands (especially in Victoria) also feature.

As noted for the Australian population as a whole, migration effectiveness is strongly associated with net migration rates at the SD level (Bell 1995: 112), although for the Indigenous population this is mostly so for positive MERs. This is an interesting observation in terms of interpreting the role of migration in contributing towards the urbanisation of the Indigenous population. In contrast with the population generally, high inter-regional turnover rates for the Indigenous population, involving half or more of a region's population, tend to be associated with metropolitan areas, notably Brisbane, Perth, Melbourne and Adelaide (Gray 1989; Taylor & Bell 1999). The Indigenous populations of Canberra and Darwin also display relatively high rates of turnover, even in these typically migrant cities. For example, the rate of turnover of the Indigenous population of Canberra in 1996 was 1.5 times that of the rest of the population.

POPULATION TURNOVER

High Indigenous population turnover is associated with movement between cities and their hinterlands (Taylor & Bell 1999). Gray (1989: 133) has made the point using 1986 Census data that this tends to undermine the notion of an urban Indigenous population as distinct from any other. He goes further to suggest that Indigenous people in the city are not just similar to those in country areas—to a large extent they are the 'same' people spatially displaced at different stages of their lives (Gray 1989: 133). The basis for this assertion stems from his analysis of the age-specific pattern of net flows in and out of cities with two overlapping patterns of urbanisation observed. The first was evident in the large metropolitan centres of Sydney and Melbourne and involved a cycle of young single people moving to the city, then returning to the country maybe 10 years later taking their new families with them. The second pattern was focused on the smaller cities of Adelaide and Perth and involved more permanent migration, possibly owing to the existence of more active Aboriginal housing programs in those cities. In all states, net in-migration to cities was concentrated in the 15–24 age group, highlighting an economic imperative in the context of education, training and job search, while out-migration at older ages reflects difficulties in securing family housing. The common socioeconomic determinant here was the much greater reliance of Indigenous people on access to housing via the public sector (Gray 1989, 2004).

If we consider the more recent age profile of Indigenous net migration to capital cities as shown in Fig. 5, it appears that not much has changed since Gray's analysis 20 years ago. Overall, movement into cities tends to peak in the young adult age groups and tapers off thereafter. In Sydney, the 15–24 age group is the only one displaying net gains, with all other age groups losing population due to migration. Melbourne and Darwin are somewhat similar in having clear net gains up to middle ages, and clear net losses at older ages. Adelaide, Perth and Hobart also experience net gains of youth and young adults, but tend to experience net migration balance at all other ages. Brisbane is the only capital city to record consistent net gains at almost all ages. Canberra's pattern is somewhat erratic, possibly reflecting the influence of professional career-based migration.

As might be expected, a strong positive relationship exists in Australia between regional net migration gain and regional population growth. Put simply, regions that experience growth in population do so largely because of net gains from migration. Conversely, those experiencing decline do so mostly because of net migration losses. While the form of this relationship also holds for the Indigenous population, the association is much weaker with many regions, especially those focused on metropolitan areas or with mostly urban populations, experiencing population growth (substantial at times) far above expectation given their net migration rate. This is underlined by the fact that some regions display high population growth despite experiencing negative net migration. For example, between 1991 and 1996, the metropolitan area of Sydney experienced a 31 per cent increase in its Indigenous population despite experiencing a net migration loss (Taylor & Bell 1999). Overall, this low association can be traced to non-demographic factors in population growth, mostly an increased propensity for individuals to identify as Indigenous in the census.

When combined with high population turnover, this issue of changing census identity can create substantial demographic upheaval. Indeed, city regions that generally display the highest population turnover also tend to record the largest shifts in the propensity to identify as Indigenous in census counts. For example, if we consider the Moreton region on the outskirts of Brisbane (which sits within the former South East Queensland Aboriginal and Torres Strait Islander Commission (ATSIC) Regional Council Area and encompasses the area from Gold Coast through Toowoomba to Noosa), what are the implications for planning service delivery in this region when it is clear that the population profiled using census data is substantially altered by newly identifying Indigenous people, with numerous movers out of the region replaced by numerous movers in? We know, for example, that around 40 per cent of population growth in this region between 1991 and 1996 was due to change in the propensity to identify. Of those who declared Indigenous status in 1996, 75 per cent had changed residence since 1991 and 33 per cent changed residence each year. In addition, there was almost 60 per cent turnover of the population in the five-year period since 1991 (Taylor & Bell 1999). In a region such as this it is probable that, by the time planning processes emerge out of census data analysis, the individual targets of social policy would have changed. Whether it also means that the characteristics of targeted populations would also alter remains a moot point.

Achieving greater predictability in the estimation of future policy needs in such regions requires a detailed examination of which groups in and around cities contribute most to population movement and their

effect on the demographic structure and socioeconomic status of the regional population. Alongside this, we require a better understanding of the factors contributing to Indigenous identification in census counts. There is an individual dimension to consider as well in terms of the role that successive relocations play in affecting socioeconomic outcomes. So far, though, aside from the Department of Employment, Workplace Relations and Small Business longitudinal survey of Indigenous job seekers, there are few data with which to examine this issue.

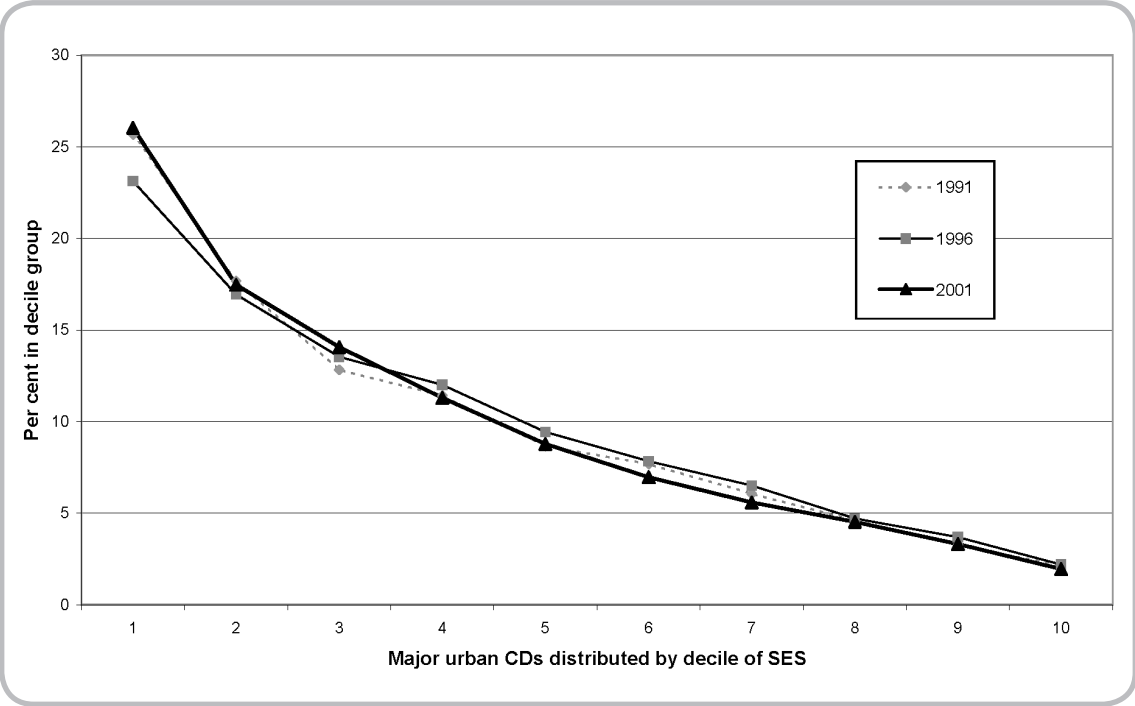
The uncertainty presented by high metropolitan mobility extends into more general areas of policy response. For example, many components of social and economic program delivery attach a timeframe to their implementation. Job Network regulations provide one such instance, whereby a continuous six-month work placement of agency clients is required before fees for placement are released. This is similar to the wage assistance eligibility criteria under the Indigenous Employment Policy, and the system of cash bonuses to CDEP schemes contingent on the transfer of scheme participants into mainstream work for a minimum six-month period. In both these cases high mobility levels may render compliance by agencies more difficult. Another example is provided by Centrelink services which operate according to a variety of cycles—the most common being fortnightly—but the system of payments, assessments and placements is often thwarted by the residential shifts of many clients (Sanders 1999). In this context, the very high rates of mobility observed among the Indigenous unemployed should be noted (Taylor & Bell 1999).

LOCATIONAL DISADVANTAGE IN CITIES

In the current debate surrounding the best means to secure Indigenous socioeconomic improvement, a number of commentators have advocated enhanced migration to urban centres as a panacea (Gregory 2005; Hughes 2005; Johns 2006). While some relationship exists between Indigenous socioeconomic status and location in the various levels of the settlement hierarchy (Hunter 2004; Taylor 1993), in the local context of access to resources and capacity for social and economic participation, it is often more important to consider the outcome relative to other people in the same location. On this basis, Indigenous people as a group are substantially disadvantaged relative to their non-Indigenous counterparts at each level of the settlement hierarchy, regardless of location.

It is well documented that Australian cities are spatially diverse in terms of the socioeconomic status of neighbourhoods and suburbs (Baum et al. 2005; Burnley 2001; Gregory & Hunter 1995), and a number of studies have identified Indigenous status as one persistent factor underlying this (Commonwealth of Australia 1996). The reason for this is that Indigenous people are over-represented in the poorest city neighbourhoods and this pattern appears to be very stable over time, despite substantial growth in the major urban population. Moreover, within these poorest neighbourhoods Indigenous people continue to display the worst economic outcomes. Consider just one key indicator—unemployment rates. In suburbs where these are high overall, Indigenous rates are the highest. To take just a few examples from the 2001 Census, the Elizabeth area of North Adelaide had one of the nation's highest urban unemployment rates for non-Indigenous people at

Fig. 6. Distribution of Indigenous population in major urban CDs by decile of SES, 1991, 1996, and 2001

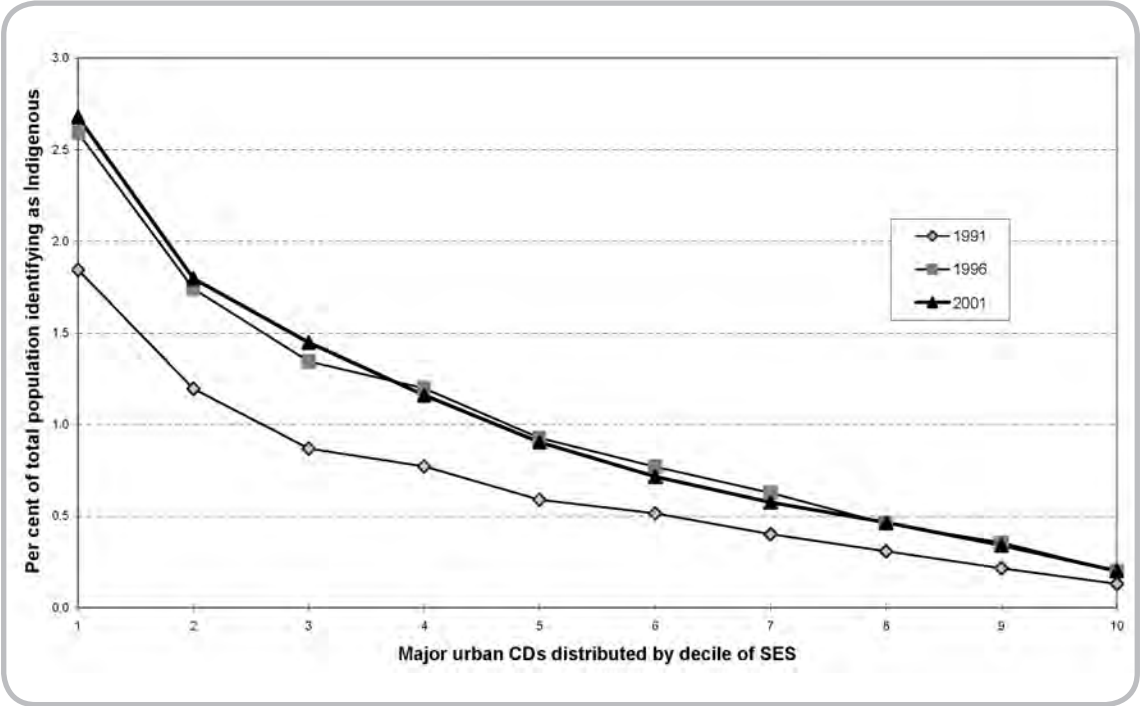


Sources: Taylor 2003a; customised ABS 2001 Census tables.

21 per cent. Among Indigenous residents of Elizabeth, however, the unemployment rate was 34 per cent. In Macquarie Fields in Sydney, non-Indigenous unemployment was 11 per cent compared to 30 per cent for Indigenous residents. In the Waterloo suburb of south Sydney, the equivalent figures were 17 per cent and 42 per cent, and in the Airds district of Campbelltown they were 29 per cent and 39 per cent respectively. In Brisbane, Inala recorded a very high level of non-Indigenous unemployment at 19 per cent, yet the Indigenous unemployment rate in this suburb was 35 per cent.

While the pattern of residence by neighbourhood status is of interest in itself, the more pressing question for policy is whether it is changing over time. To test this for 1991 and 1996, Hunter (1996) assigned an index of Socio-Economic Status (SES) for each Collection District (CD) in major urban areas. Conceptually, this index was devised in similar fashion to the then ABS Socio-Economic Index For Areas (SEIFA) urban index of relative advantage in providing a summary measure of income, housing, education and occupational status with high indexes indicating relatively high status across these indicators. Here we have added the 2001 ABS SEIFA index of relative disadvantage in order to extend the time series. While this is based on more indicators than the earlier Hunter index, it is drawn from a similar suite of personal and household characteristics

Fig. 7. Percentage of the population identifying as Indigenous in major urban CDs by decile of SES, 1991, 1996, and 2001



Sources: Taylor 2003a; customised ABS 2001 Census tables.

and can therefore be applied to establish a broad comparative measure of change over time. The results of plotting Indigenous population distributions in major urban CDs by deciles of these SES indexes for each census year are shown in Fig. 6. As a decile construction, the total population would be evenly distributed but, as we can see, this is not so for the Indigenous population.

The proportion of the Indigenous population is highest (around 25%) in the decile of CDs that have the lowest SES in major cities, and this proportion declines steadily with increasing neighbourhood status. More importantly, in the context of the present discussion, no change in this pattern is discernable over the decade between 1991 and 2001. If anything, the indication is that concentration in the lowest SES neighbourhoods might have slightly increased, although this may reflect the fact that the ABS SEIFA index for 2001 includes Indigenous status as one of its disadvantage variables, whereas the indexes used for 1991 and 1996 do not. This appears to be backed up by Fig. 7 which compares the distribution of the population identifying as Indigenous in major urban CDs in 1991, 1996 and 2001 according to the SES of the CD of residence. Thus, over the decade since 1991, it appears that Indigenous people have comprised a progressively rising share of total population in the lowest status neighbourhoods and (since 1996) a falling share in middle-ranked

neighbourhoods. It is worth noting that Hunter's (1996) analysis found that this pattern was consistent in each of the major urban areas, varying slightly only in degree but not in kind. On the basis of the overall trend, there is no reason to suspect that this consistency between cities would not have also held for 2001.

It would appear, then, that despite substantial intercensal increases in the Indigenous population in major cities, there has been little alteration in the pattern of Indigenous residential location by neighbourhood type. This observation is highly significant since the role of increased identification as a component of population growth in urban areas has raised a number of questions regarding the impact on overall SES due to new entrants to the population. Clearly, these results suggest that new additions to the population have very similar characteristics to previously identified Indigenous populations and are therefore most likely drawn from previously unidentified Indigenous persons. Policy-wise, the key finding is the lack of social mobility within major cities and the seemingly entrenched pattern of spatial disadvantage.

TEMPORARY MOBILITY

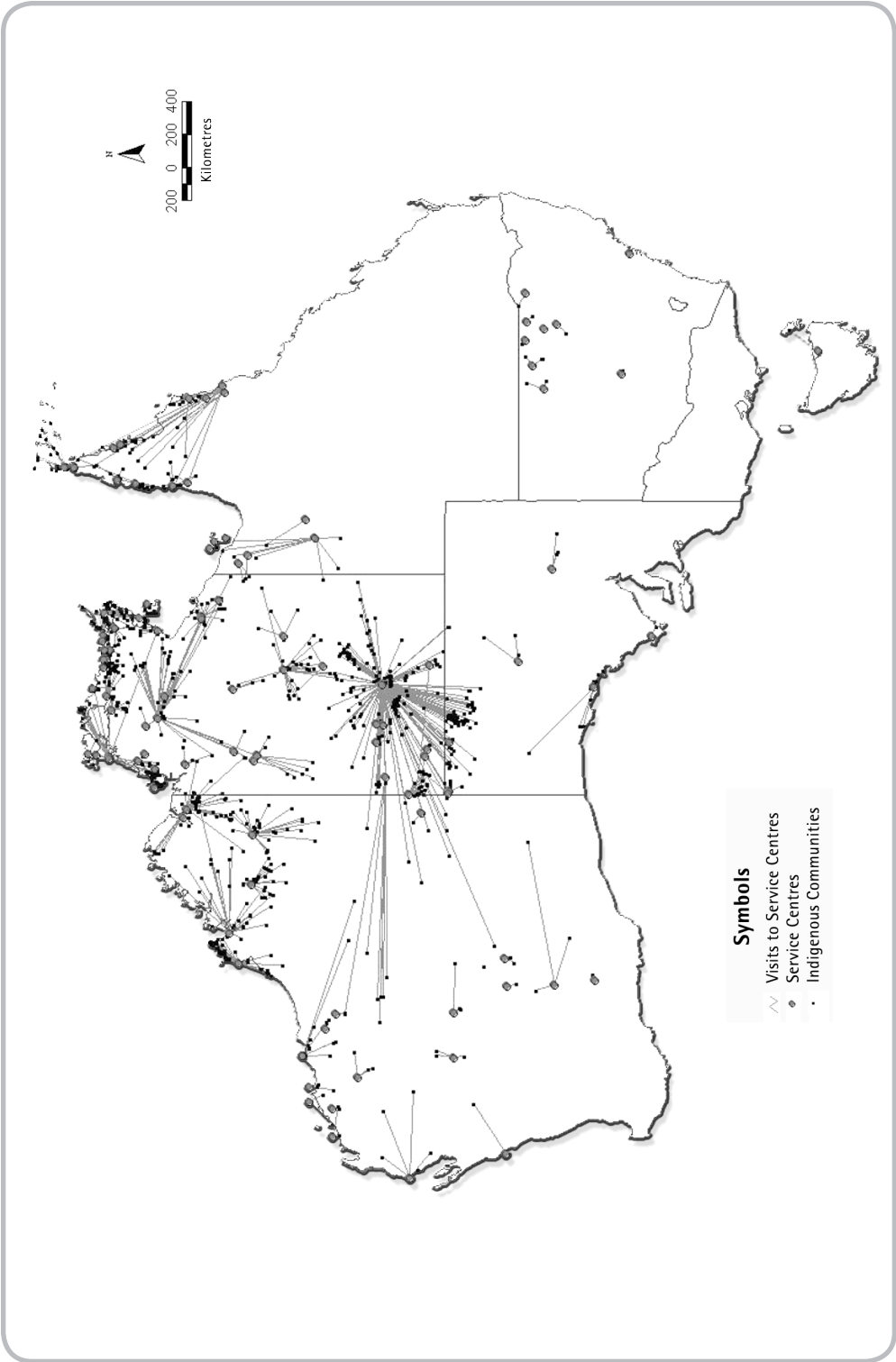
One characteristic of the Indigenous population which is widely acknowledged as having implications for the delivery of health, housing, employment, education and training services is a propensity for frequent mobility over the short-term (Memmott, Long & Thomson 2006; Taylor 1998; Taylor & Bell 2004). This is because of the impact that population shifts may have on the level and composition of service demand and usage in different localities. At the same time, very little is known in a comprehensive way about the scale, direction and pattern of such mobility, or about the characteristics of those involved.

A good example of this lack of information is provided by the 1992 report of the House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs (HRSCATSIA) into the needs of urban dwelling Indigenous people (HRSCATSIA 1992). This report devoted a whole chapter to the needs of what it called 'itinerant' people but provided very few data on itinerancy, save for a comment on the higher than average proportion of Indigenous people in hostels and refuges and a table showing the number of beds provided by Aboriginal Hostels Limited. The fact is that policy makers who contemplate the effects of temporary mobility on the spatial pattern of demand for services do so in an information vacuum.

The basic policy issue at stake here is how to most effectively plan for a population that is frequently mobile over the short-term. How is the need for services best defined and provided for when individuals often shift their place of residence, even within the same locality? Which population should be employed as the base when considering such issues as overcrowding in dwellings, the demand for schools, or use of medical facilities? To begin to answer such questions, there is a fundamental need for information indicating the volume, pattern and duration of short-term population movements.

One way of presenting a snapshot of the numbers involved in short-term migration, and the pattern of relocation that this creates, is by cross-tabulating census data on place of enumeration by place of usual residence. In 1991, this revealed that 7 per cent of the Indigenous population was enumerated away from their usual place of residence, somewhat higher than the 4.9 per cent recorded for the population as a whole (Taylor 1998). Examination of the spatial pattern of this displacement, using the original 60 ATSIC regional

Fig. 8. Journey to service centres from discrete Indigenous communities in remote Australia



Source: Taylor 2002.

boundaries, revealed that almost half of all moves (43%) were relatively long-distance to another region with most of these being transfers between non-metropolitan and major city regions. Very little short-term Indigenous population transfer was recorded between major cities. Of greater significance was the net effect of these movements in terms of temporarily adding to, or subtracting from, regional populations. Overall, net rates of inter-regional movement were low with gains or losses rarely exceeding 2 per cent of any region's usual resident population, although no doubt the demographic impacts of temporary movement are much greater at the sub-regional level in particular localities. At the same time, a fairly regular pattern of regional net gain and loss is evident. It is noticeable, for example, that all major city regions experience net gains, while the majority of broad non-metropolitan regions (80%) record net losses—a pattern of short-term movement opposite to that observed for the total population (Bell & Ward 2000). The indication is that at any one time a proportion of the Indigenous population of major cities and regional centres around the country is comprised of individuals from surrounding areas who are only short-term residents. In 1991, this proportion varied considerably, from just over 2 per cent in Sydney to over 11 per cent in Darwin. In each case this net shift of short-term movers reflects the spatial concentration of higher-order services in relation to the distribution of much of the Indigenous population. For many Indigenous people access to banks, hospitals, government offices, employment opportunities, public housing, sporting events, education and training institutions involves considerable travel and time away from home.

The effect of this mobility to service centres is to create a pool or catchment of population around each service town. Some sense of the size of these population catchments, and their spatial extent, is provided by data from the Indigenous Community Housing and Infrastructure Needs Survey (CHINS) conducted by the ABS. This survey records the nearest town that members of each community in remote Australia travel to, in order to access higher order services such as banking and major shopping. In the 1999 survey a total of 96 service centres were identified across remote Australia, servicing 1,100 smaller communities with a collective population of 80,000 (Taylor 2002). An indication of the spatial pattern of their catchment areas is provided in Fig. 8.

The map highlights the major role played by Alice Springs in servicing vast areas of central Australia. In all, Alice Springs (population 24,000) services some 260 small Indigenous communities encompassing a combined estimated population of 15,000. Moving north, Katherine and Darwin emerge as other major regional centres of attraction, while Cairns stands out in north Queensland. In Western Australia, a string of smaller catchment areas are evident. In each case, the primary direction of circular movement for service access is illustrated and it is significant that not all populations access their nearest service centre. This is partly a function of variable transportation links, but in some instances it reflects patterns of cultural affiliation, as among desert peoples in the centre of Western Australia who prefer to travel long distances eastwards to towns in the Northern Territory. Also of note are the vast distances traversed within many of the catchment areas involving round trips of 1,000 kilometres or more.

Movement of individuals to access services can also generate ancillary flows. For example, in many parts of remote Australia health care strategies are predicated on the air evacuation of Indigenous patients to urban centres for hospital and other health services. Research among the Yolngu of northeast Arnhem Land suggests that this transfer of medical patients represents only a fraction of total health-related mobility as it also generates much larger, related movements, primarily of kinfolk anxious to fulfil cultural obligations to 'keep company' with their sick relatives for the duration of treatment (Coulehan 1995). Such transience is enhanced by the fact that the threshold for hospital admissions is often lowered in an attempt to improve morbidity and mortality rates among remote populations, as well as to compensate for the lower effective health service delivery in Aboriginal communities.

This spatial dichotomy between the concentration of services and dispersion of population over vast distances raises a number of questions regarding access and equity (Memmott, Long & Thomson 2006; Taylor 1998). For example, if the residence pattern of many Indigenous people is multi-locale, where are services optimally located? Should services be replicated to cater for frequent movement between places? If urban areas are net recipients of temporary sojourners, should urban services be augmented to compensate for additional loads, or should attempts be made to decentralise service delivery to overcome the need for movement? Although the provision of hostel accommodation in towns provides one example of augmented services, what of the pressure on housing in town camps and suburban areas that frequently host visitors? Ultimately, in which location are services legitimately claimed?

TOWN CAMPS

Many of the issues that arise as a consequence of short-term population movement find their expression in Aboriginal living areas within remote regional towns. In 1982, these so-called town camps were officially defined as comprising 'any group of Aboriginals living at identified camp sites near or within towns or cities which form part of the socio cultural structure of towns and cities, but which have a lifestyle that does not conform to that of the majority of non Aboriginal residents and are not provided with essential services and housing on a basis comparable to the rest of the population' (HRSCAA 1982: 5-6). While the term 'town camps' has persisted, many such localities are in effect now residential suburbs, although the levels of infrastructure available, the management regimes, and legal tenure of such sites invariably remain at variance with the rest of the urban centre.

For the most part, town camps are a feature of remote Australia, especially in the Northern Territory and Western Australia. Following the displacement of Indigenous people from station work after the granting of the pastoral award in the 1960s, many regional centres such as Darwin, Katherine, Kununurra, Halls Creek, Fitzroy Crossing, Tennant Creek and Alice Springs experienced an influx of people forced into makeshift residential arrangements that were located physically within the boundaries of town or shire councils (or at least on their fringes) but sat administratively outside of their declared areas of responsibility (Lea 1987, 1989; Sanders 1984). Over subsequent years, while the legal and infrastructural status of town camps has become more regularised, they have invariably been viewed by town councils and Indigenous migrants

themselves as a convenient solution to meeting short-term accommodation needs, building on the strong family connections that particular town camps maintain with countrymen from outlying settlements. However, as population numbers have generally risen, and as the necessity for short-term movement into regional towns has also grown as people become more enmeshed in a cash economy, questions are emerging about the adequate measurement of demand on town camp infrastructure and services in a context of high population turnover.

Considerable variety exists in terms of the social and physical structure of town camps ranging from the ephemeral and hastily constructed dry season camp of one family or tribal group (often renewed annually at the same site) through to permanently occupied camps with identifiable core populations—some consisting of one or two related groups and others with a mixture of several groups/tribes/families often with a large transient component. These permanent camps vary considerably in terms of quality of housing and infrastructure, from rudimentary shacks with no amenities at all to housing and urban services comparable to those available in any standard suburb.

Apart from the blurring caused by this diversity in Aboriginal housing supply, simple distinctions between the population of town camps and the rest of the urban area are further complicated by intra urban population movement. Unfortunately, census migration data are not sufficiently fine grained in the small town context to provide any indication of intra-urban mobility, while survey work aimed at determining the extent to which such movement does or does not take place has been limited. Consequently, discussion of the precise mechanisms of Aboriginal settlement in these urban settings is conducted largely in a void. From a policy perspective, in terms of estimating and planning for appropriate levels of Aboriginal housing in town camps or elsewhere in the urban area, there is little appreciation of how individual and household transfers between town and country and between different components of the urban housing supply system impact on each other.

In defining a niche for town camps, the tendency to date has been to view the options for Aboriginal urban settlement in simple oppositional terms between residence in a town camp, residence in a suburban house, or residence in a rural community. In this view, the process of settlement is determined by lifestyle criteria (traditional/non traditional) and structured by generalised and opposing modes of living—either you are a town camper, a suburbanite, or a community resident. The reality is more complex, as it is often difficult to draw social, economic, and cultural distinctions between these categories.

While the majority of Aboriginal people in north Australia who live in suburban houses occupy rented housing commission dwellings there are some, albeit relatively few, who obtain accommodation through their employer, either public or private, or who are privately renting or purchasing a property. On the other hand, in some urban centres, Aboriginal organisations own conventional houses in suburban areas and rent these out to Aboriginal clients in circumstances not unlike that of certain town camps. Apart from these options, accommodation in town is also available at Aboriginal hostels which, in theory, are intended for short-term occupancy only but, in practice, often provide a base for longer term residency of up to a year or more.

The only studies that have attempted to quantify population flows in and out of these components of remote urban housing markets are Taylor's (1990a) analysis of intra-urban Indigenous mobility in Katherine in the Northern Territory, and the more recent Tangentyere Population and Mobility Study conducted in the 19 town camps of Alice Springs in 2005 by the Tangentyere Council Research Unit (as yet unpublished). Both of these reveal considerable movement between town camps, hostels, and suburban dwellings, as well as directly between the urban area and surrounding rural communities. This latter mobility typifies the spatial interaction between remote towns and their surrounding regions and is stimulated by the location of kinfolk resident in both town and country, as well as by the disproportionate access to higher order goods and services experienced by people living in remoter rural areas. For those migrants who seek to remain in town, residential choices are often dictated by expediency and this can involve movement between town camps, hostels, and accommodation shared with friends or relatives in more conventional suburban housing. Outside of this there are others who occupy dry season camps in and around the town area.

From both studies, it is apparent that circular flows of population through the urban residential market and out again to surrounding communities render estimation of the Indigenous town camp populations, and indeed of the Indigenous population of entire urban areas, difficult. Not surprisingly, the only study to actually observe the official enumeration of Indigenous people in town camps (in Alice Springs at the 2001 Census) found that the count proved extremely difficult and did not capture all people present, particularly visitors (Sanders 2004). The pressing issue, then, is how to adequately estimate town camp service population levels?

The 1996 ABS Review of Demography Statistics identified considerable support for the estimation of what it refers to as 'service populations' (ABS 1996: 12). This concept arises out of the fact that estimates of usual resident population often fail to account for the use of local services and infrastructure by non-residents. In general, government agencies have expressed an interest in service population estimates to assist in policy and planning activities as well as in calculating costs associated with service provision (ABS 1996: 9), although much work remains to standardise the definition of a service population and establish methodologies for measurement. For Indigenous populations, such work as exists suggests that three population totals may be derived for a given locality:

- a base population, defined as the sum of people (residents and visitors) counted by the conventional means of recording the numbers resident at each dwelling at the time of a survey;
- a potential population, defined as the sum of the largest number of persons ever to have been accommodated in each dwelling in the course of the year; and
- a service population, defined as the average population likely to be present at any given time. This is assumed to lie somewhere between the base and potential populations and is estimated from data on visitor numbers and duration of stay.

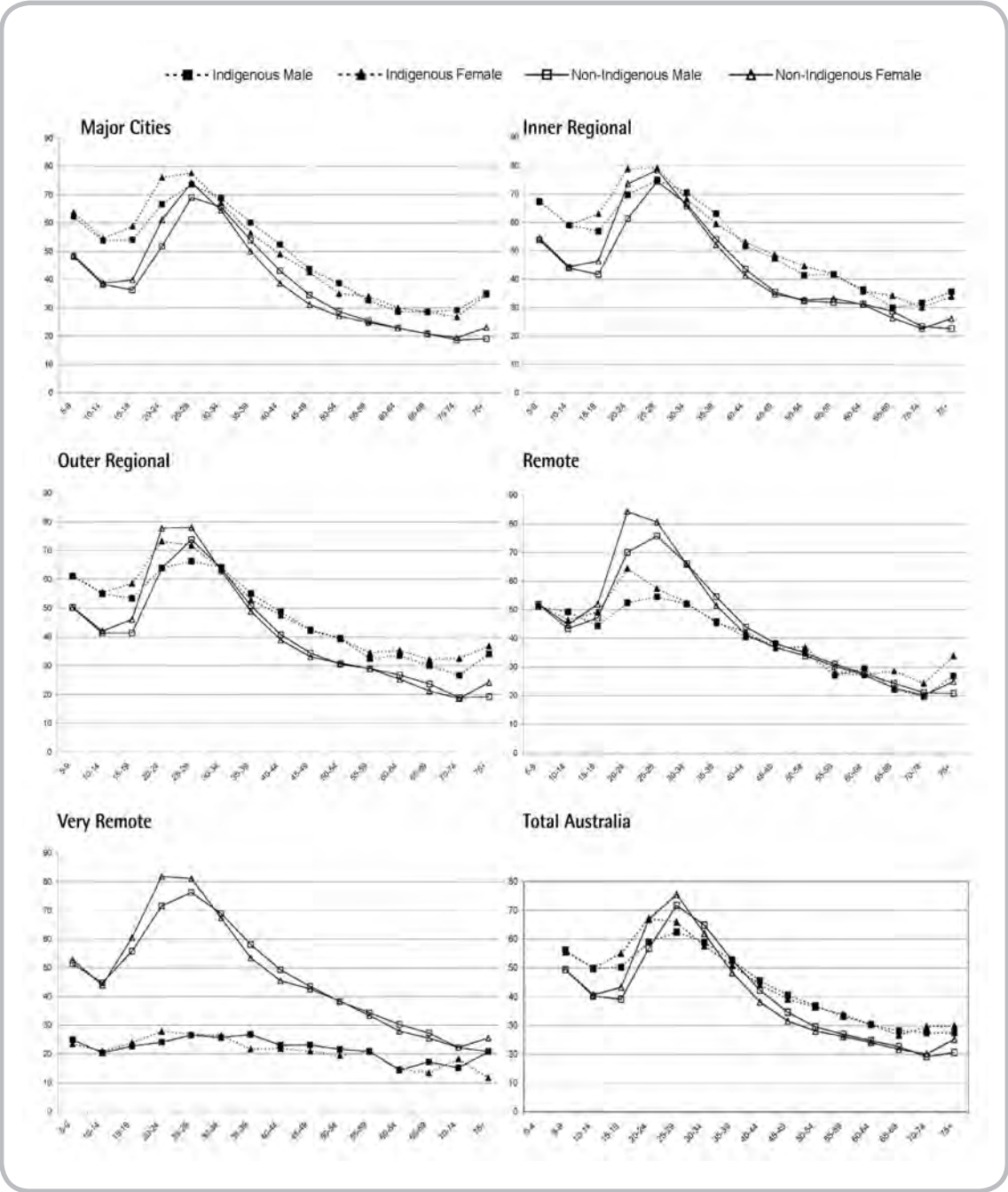
Variation in these population estimates can be quite substantial. An example is provided by data from a survey of the Bagot Community in Darwin (Taylor 1998). At the time of the survey this was a community

of some 300 individuals occupying 40 dwellings on crown lease land. Because of a steady flow of visitors, the service population was estimated to be 41 per cent higher than the base population while the potential population was as much as 75 per cent higher. The considerable effect that this can have on estimates of overcrowding was shown by an almost doubling of housing occupancy rates from 7.5 persons per dwelling to around 13 persons. Similar calculations for the entire town of Katherine revealed a service population 30 per cent higher than the base with average occupancy ranging from six to nine persons per dwelling (Taylor 1990b). In 2005, the Tangentyere Population and Mobility Study estimated a potential service population for the 19 town camps in Alice Springs as high as 3,500 (using core residents plus visitor flows over a one year period). This compared to a town camp census count in 2001 of less than 1,000. Similar large gaps between enumerated and usually resident populations have also been reported for outlying Aboriginal communities in Central Australia (Warchivker, Tjapangati & Wakerman 2000). Because of such discrepancies, some time ago Young (1990) advocated for a regional approach to the estimation of Indigenous service delivery needs in central Australia.

While there is no doubt imprecision here, it is clear that much more needs to be done to adequately establish the true levels of service delivery and infrastructure needs in town camps. The indication is that census counts alone fail to capture this and that the short-term nature of much movement in and out of town camps leads to a substantial underestimation of demographic impacts. At the very least, in planning for service provision recognition needs to be given to the role that central places fulfil on behalf of adjacent hinterlands. Also apparent is a need to include temporary residents in estimations of household size. While visitation to households may be an infrequent occurrence in the general Australian population, this is not the case for Indigenous households (Finlayson 1991; Henry & Smith 2002; Martin & Taylor 1996; Taylor 1990b). In the meantime, place of enumeration data are best used as a guide to estimating service demand in urban areas, particularly in northern Australia, in the knowledge that these should include a component of temporary residents. Research is also needed to better identify this temporary component in the population, what their special needs are, and where and how these are best met. Many so-called transients in town are, in fact, relatively long-stayers, and while such people may ultimately return to a rural community, the issue of their service requirements whilst away from home is pertinent. Apart from the obvious question of accommodation needs there may also be implications for health and education services, while relatively long absences from home also raise questions about employment and training prospects.

In many rural areas, particularly those in the Northern Territory and parts of Western Australia, South Australia and Queensland, net temporary population loss is prevalent. To compensate for this it is essential that usual place of residence data are employed as the basis for estimating community service requirements as many of the issues raised in regard to urban areas apply equally in rural contexts (e.g. in terms of the interactions between outstations and associated host townships). The fact is an enormous research and information gap prevails in regard to the impact of short-term population movements in remote Australia.

Fig. 9. Age and sex profile of Indigenous and non-Indigenous mobility rates by remoteness category, 1996–2001



Source: Taylor 2006.

SPATIAL REDISTRIBUTION AND THE SETTLEMENT HIERARCHY

In the analysis of Australian population movement using census data, most attention to date has been focused on redistribution by state and territory jurisdictions or by large statistical regions, given the inability to establish stable geography at lower scales of analysis over time and the pressing need for demographic accounting to inform the processes of fiscal federalism. However, it is arguably the case that from a social policy and social science perspective it is more important to determine the localised impacts of movement—in particular those that flag a change in the structural circumstances of migrants vis à vis proximity to labour markets and associated life opportunities. One aspect of the latter, which is grossly under-researched, is movement between various levels of the Australian settlement hierarchy.

REMOTENESS AND MOBILITY

Reference to 'remote' areas is long-standing in Australian regional analysis. Essentially, the term draws attention to a distinction in social and economic geography between closely settled areas and sparsely settled areas, with economic development and service provision severely impeded in the latter by force of relative locational disadvantage, low accessibility, and a specialisation of economic activity. As indicated in Table 1, in 2001, 26 per cent of the Indigenous population (121,000 people) was estimated to be resident in remote and very remote areas compared to only 2 per cent of the non-Indigenous population (though greater in number at 382,000).

So far, the discussion surrounding the impact of residential migration on Indigenous socioeconomic status has focused on the role of movement to urban areas. A more accurate way of depicting the structural shifts that accompany population redistribution is to refer to changes in residential location that influence the remoteness of populations and therefore alter individual access to goods, services and potential for social and economic interaction. In effect, do people move to places that are more, or less, accessible from the perspective of participation in mainstream society? The capacity to explore mobility by a measure of remoteness is provided for the first time by the 2001 Census ASGC. This incorporates a continuum from those spatial units where geographic distance imposes minimal restriction on physical access to the widest range of goods, services and opportunities for social interaction, to those where such restriction is maximised (ABS 2001: 19).

In Fig. 9, Indigenous and non-Indigenous propensities to move are shown by age and sex for each of the five broad remoteness categories. Overall, at the national level, the age profile of mobility for Indigenous people is broadly similar to that observed for all other Australians with movement rates peaking in the twenties age range followed by a sharp decline. A secondary peak in rates is also evident among infants and children reflecting the migration of family groups. The other feature in common is that female mobility rates tend to be higher than male rates, though only slightly. However, a key point of difference is the much flatter age profile for both Indigenous males and females, resulting in lower rates in the 15–34 years age range and higher rates either side of this.

For the population as a whole, the peak in the age profile of migration in the young adult age range has been firmly linked to the combined influence of life cycle events including departure from the parental home, the start of tertiary education and training, entry into the labour force and the establishment of independent living arrangements (Bell 1995: 19–24). While broad agreement in this patterning of migration by age suggests that similar influences also bear on the Indigenous young adult population, the much flatter profile of Indigenous mobility also indicates that such drivers are weaker. This no doubt reflects a combination of cultural and socioeconomic factors. For example, much lower labor force participation is observed for Indigenous people at ages when job search and job mobility are primary factors in population movement for the rest of the population. Also, the establishment of independent living arrangements is likely to be less of a stimulus for migration among young Indigenous adults in a cultural setting that places emphasis on maintaining extended kinship ties. In any case, there is often a shortage of available housing to accommodate new household formation, and this combined with high dependence on rental housing, presents an additional mobility constraint (Gray 2004; Henry & Smith 2002).

To the extent that such factors may be influential in stimulating different rates of mobility, it is interesting to note that the intensity of Indigenous (and non-Indigenous) movement varies substantially according to remoteness region. Thus, in major cities, Indigenous people are more mobile than non-Indigenous people at all ages. As we move out from major cities progressively to very remote regions, the marked peaks among children and young adults in the age profile of Indigenous mobility are seen to progressively diminish to the point where age appears to have no effect at all on mobility in very remote areas and the overall level is very low. In contrast, non-Indigenous mobility rates are largely unaffected by location, although especially high rates in the 20–34 year age group are evident in remote and very remote areas mostly due to movement for employment. This lack of census-recorded Indigenous mobility in remote and very remote areas has been noted before (Taylor & Bell 1996) and conflicts with evidence from ethnographic studies that reveals high levels of circular movement in such places (Peterson 2004). At one level, this highlights methodological issues concerning the limited value of fixed-period measures of population movement in situations where circulation is the predominant form of mobility. At the same time, the component parts of Fig. 9 display a very clear progressive deflation of Indigenous movement intensity, both in terms of overall levels and the influence of age, which is suggestive of other, more socioeconomic factors at work.

SPATIAL REDISTRIBUTION: ARE INDIGENOUS PEOPLE MOVING TO MORE ACCESSIBLE REGIONS?

The question of whether redistribution through migration has any impact on the relative access of the Indigenous population to goods, services and labour markets is now capable of resolution for the first time by establishing population movement between the various categories of the ASGC remoteness structure. The first point of interest is the degree to which Indigenous people remain within or change their remoteness region of residence—in effect, to what extent do they move to a region with a different degree of relative access to goods, services and labour markets? From Table 5 we can see that Indigenous residents of major cities in 2001 are more than twice as likely than non-Indigenous residents to have been in a different

Table 5. Change in remoteness region of residence (per cent), Indigenous and non-Indigenous populations, 1996–2001			
	Indigenous (%) (1)	Non-Indigenous (%) (2)	Ratio (1/2)
Major cities	16.3	7.1	2.29
Inner regional	19.9	14.9	1.33
Outer regional	19.4	17.3	1.12
Remote	22.2	25.7	0.86
Very remote	8.2	33.9	0.24
Source: ABS 2001 Census customised tables.			

Table 6. Migration rates of Indigenous population movement between remoteness regions, 1996–2001					
	Major cities	Inner regional	Outer regional	Remote	Very remote
Movers out	12,566	13,448	13,632	5,845	8,123
Movers in	13,747	16,111	14,666	4,704	4,386
Net	1,181	2,663	1,034	-1,141	-3,737
Net rates ^a	14.6	35.8	14.2	-48.1	-48.9
Gross rate ^a	325.0	397.1	388.7	444.8	163.8
Note: a. Per thousand of the mean of the 1996 and 2001 populations.					
Source: ABS 2001 Census customised tables.					

Table 7. Migration rates of non-Indigenous population movement between remoteness regions, 1996–2001					
	Major Cities	Inner Regional	Outer Regional	Remote	Very Remote
Movers out	627,920	582,573	341,958	78,300	64,290
Movers in	628,251	685,262	283,742	53,948	43,838
Net	331	102,689	-58,216	-24,352	-20,452
Net rates ^a	0.04	24.1	-32.2	-94.7	-128.6
Gross rate ^a	141.2	297.6	345.7	514.4	679.7
Note: a. Per thousand of the mean of the 1996 and 2001 populations.					
Source: ABS 2001 Census customised tables.					

remoteness region five years previously. The Indigenous population in regional areas is also more likely to have shifted remoteness region. By contrast, in remote areas, Indigenous people (especially in very remote areas) are far more likely to have stayed put.

The numbers of people involved in these inter-regional shifts and the consequent net and gross migration rates are shown in Tables 6 and 7. In major cities and regional areas, relatively large numbers of Indigenous people are involved in migration between remoteness regions. In major cities for example, population turnover with other remoteness regions involves almost one-third of the Indigenous population (325 per thousand). This compares to only 141 per thousand among non-Indigenous major city residents. However, the net gain to major cities from this movement is much lower in both cases at just 14 per thousand for the Indigenous population and almost zero for the non-Indigenous population. By far the greatest net gains for both Indigenous and non-Indigenous populations are in the inner regional areas, although again the Indigenous gross migration rate associated with this is much higher. Outer regional areas provide an interesting contrast as these areas are net recipients of Indigenous population transfers from elsewhere, but net losers of non-Indigenous population. Finally, remote and very remote regions display net losses of both Indigenous and non-Indigenous population, although the rate of non-Indigenous loss is by far the greatest, as is the degree of non-Indigenous population turnover.

As for the direction of net migration flows, Figs 10 and 11 show these to be broadly similar for Indigenous and non-Indigenous populations with a clear overall shift in residence up the settlement hierarchy. However, significant differences are apparent in the intensity of Indigenous and non-Indigenous flows. Thus, Indigenous net losses from remote and very remote areas are most prominent to relatively adjacent outer regional areas. In turn, outer regional areas lose Indigenous population mostly to inner regional areas. This is suggestive of a step-wise migration similar to that reported in the past for Indigenous migration to major cities such as Adelaide (Gale & Wundersitz 1982). By contrast, non-Indigenous movement out of remote and very remote areas is substantial to all regions often by-passing outer regional areas, with the largest single flows occurring directly into inner regional areas and major cities suggestive of employment and housing-led mobility. The considerable difference in the intensity of net migration loss between the Indigenous and non-Indigenous populations reveals the key demographic reason why the Indigenous share of total population in remote areas continues to rise.

MIGRATION TO REGIONAL TOWNS

In an analysis of 1986 census data, 'sub-regional' urban centres were seen to play a pivotal role in attracting and distributing Indigenous migrants (Taylor 1992a). These were towns of between 10,000 and 50,000 persons typically located in the agricultural zone in the hinterlands of capital cities—what in current ASGC geography would be referred to as the inner/outer regional areas. Overall, they exhibited relatively high net migration gains from smaller places.

Fig. 10. Rates and direction of Indigenous net migration loss by remoteness region, 1996–2001

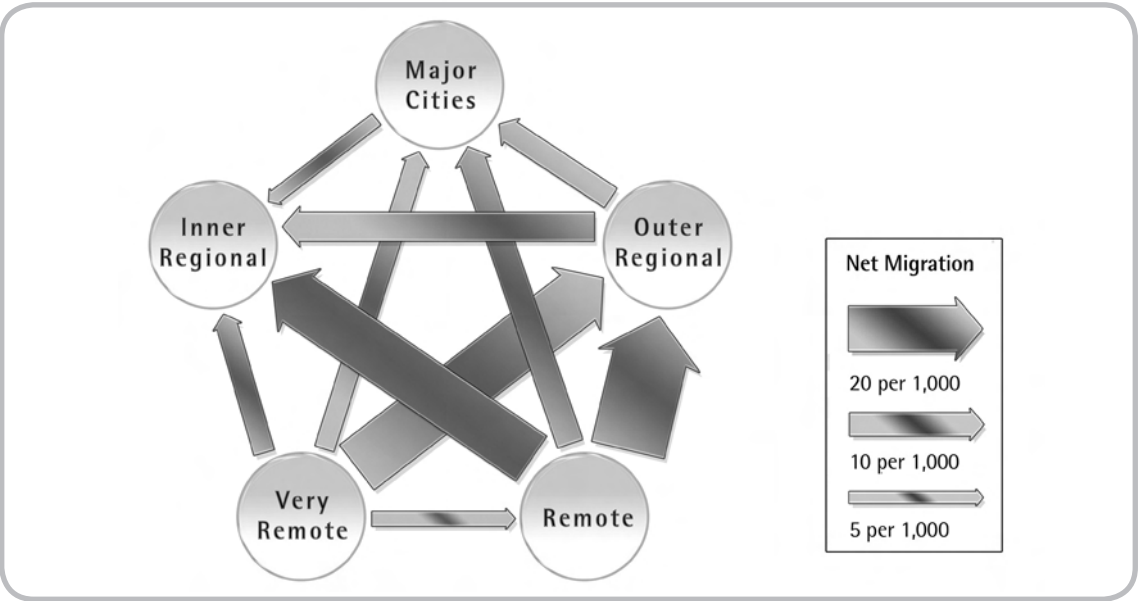


Fig. 11. Rates and direction of non-Indigenous net migration loss by remoteness region, 1996–2001

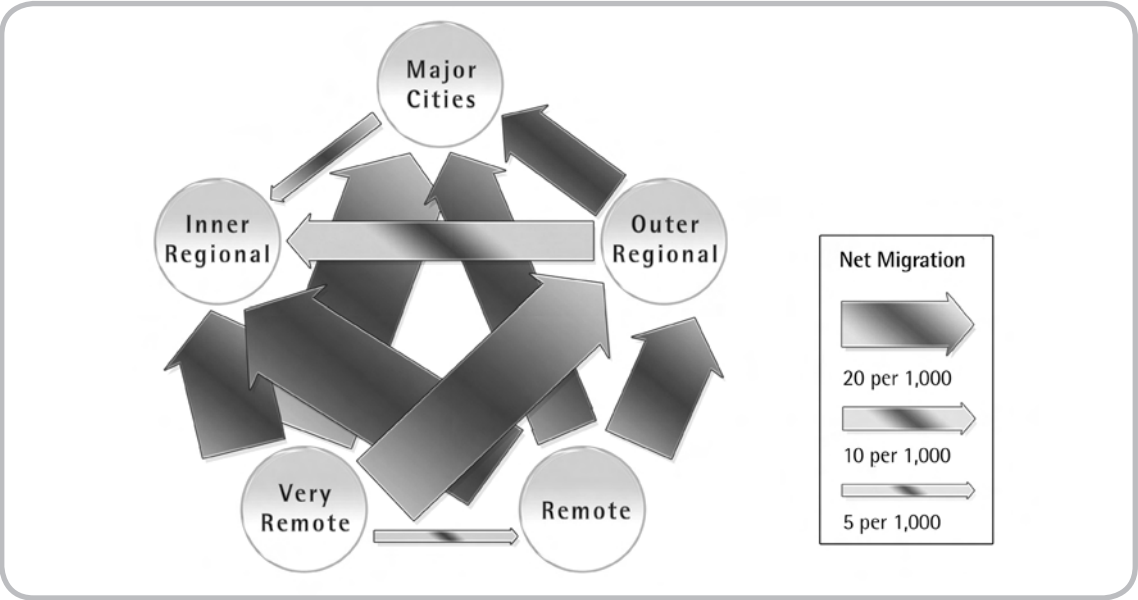


Table 8. Indigenous population change in select regional centres, 1996–2001^a

	1996	2001	Change	% change
Broken Hill	800	1,204	404	50.5
Dubbo ^b	2,891	3,750	859	29.7
Orange	1,109	1,544	435	39.2
Tamworth	1,736	2,422	686	39.5
Port Augusta	1,988	2,266	278	14.0
Kalgoorlie	1,845	2,066	221	12.0
Total	10,369	13,252	2,883	27.8

Notes: a. Estimated resident populations.

b. Based on 1996 ASGC.

Source: ABS customised tables.

Table 9. Non-Indigenous population change in select regional centres, 1996–2001^a

	1996	2001	Change	% change
Broken Hill	21,150	19,894	-1,256	-5.9
Dubbo ^b	33,642	35,004	1,362	4.0
Orange	33,719	35,455	1,736	5.1
Tamworth	33,844	34,366	522	1.5
Port Augusta	12,330	11,490	-840	-6.8
Kalgoorlie	27,742	27,317	-425	-1.5
Total	162,427	163,526	1,099	0.7

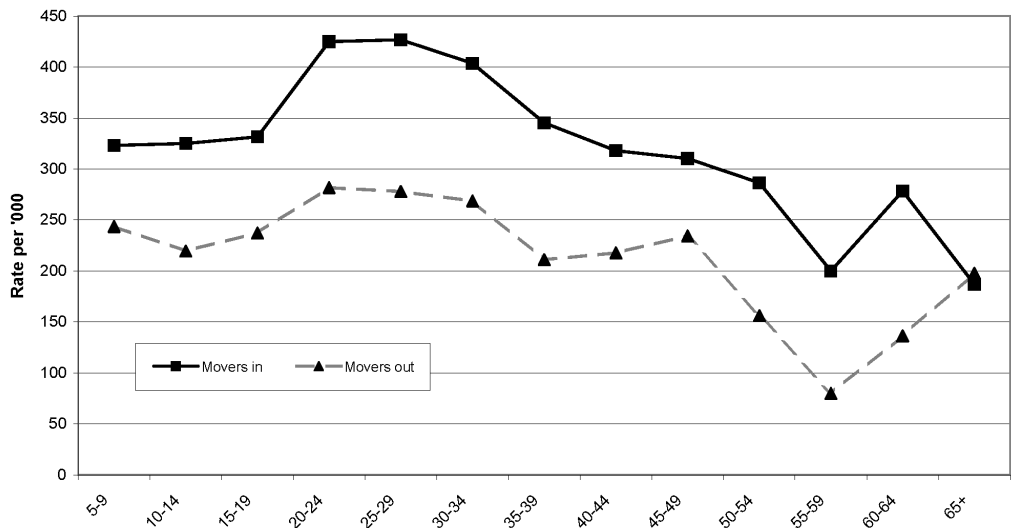
Notes: a. Estimated resident populations.

b. Based on 1996 ASGC.

Source: ABS customised tables.

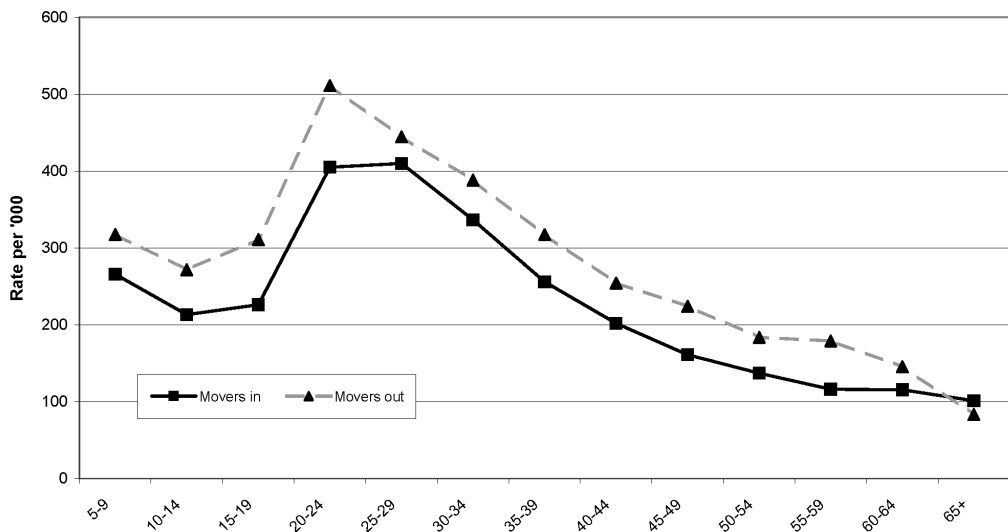
Moving ahead to 2001, examination of the growth of Indigenous population in a selection of similar towns (Broken Hill, Dubbo, Orange, Tamworth, Port Augusta and Kalgoorlie) shows that in all of these places recent Indigenous population growth has far outstripped non-Indigenous growth (Tables 8 and 9). As a consequence, the Indigenous share of population in these centres is rising (e.g. in Dubbo from 7% in 1996 to nearly 10% in 2001, in Port Augusta from 13% to 16%). Overall, between 1996 and 2001, the total population of these six regional centres increased by just over 2 per cent. By contrast, the Indigenous population grew by 28 per cent. Non-Indigenous growth was barely positive. In fact, almost three-quarters (72%) of the population growth of these regional centres was due to an expansion of Indigenous numbers.

Fig. 12. Indigenous in- and out-migration rates by age group, combined regional towns and rest of Australia, 1996–2001



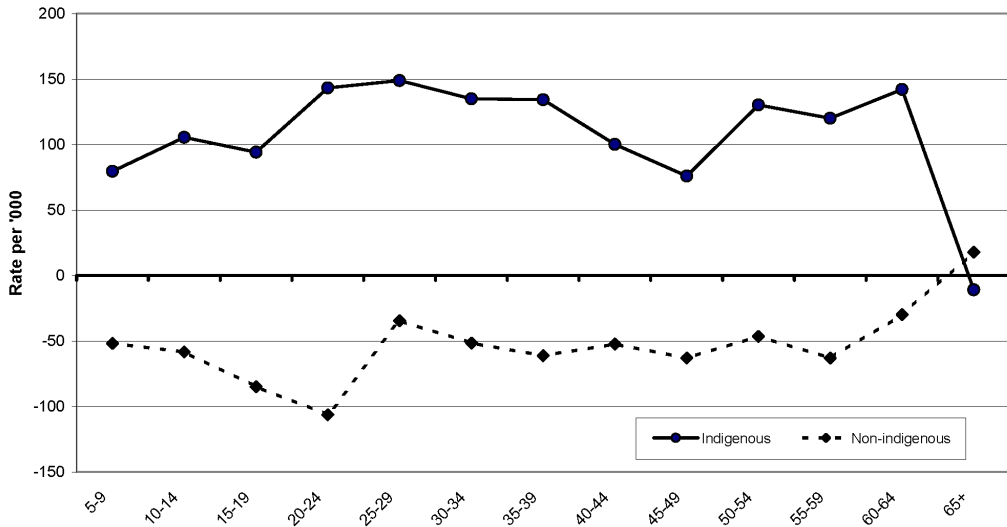
Source: ABS 2001 Census customised tables.

Fig. 13. Non-Indigenous in- and out-migration rates by age group, combined regional towns and rest of Australia, 1996–2001



Source: ABS 2001 Census customised tables.

Fig. 14. Indigenous and non-Indigenous net migration rates by age group, combined regional towns and rest of Australia, 1996–2001



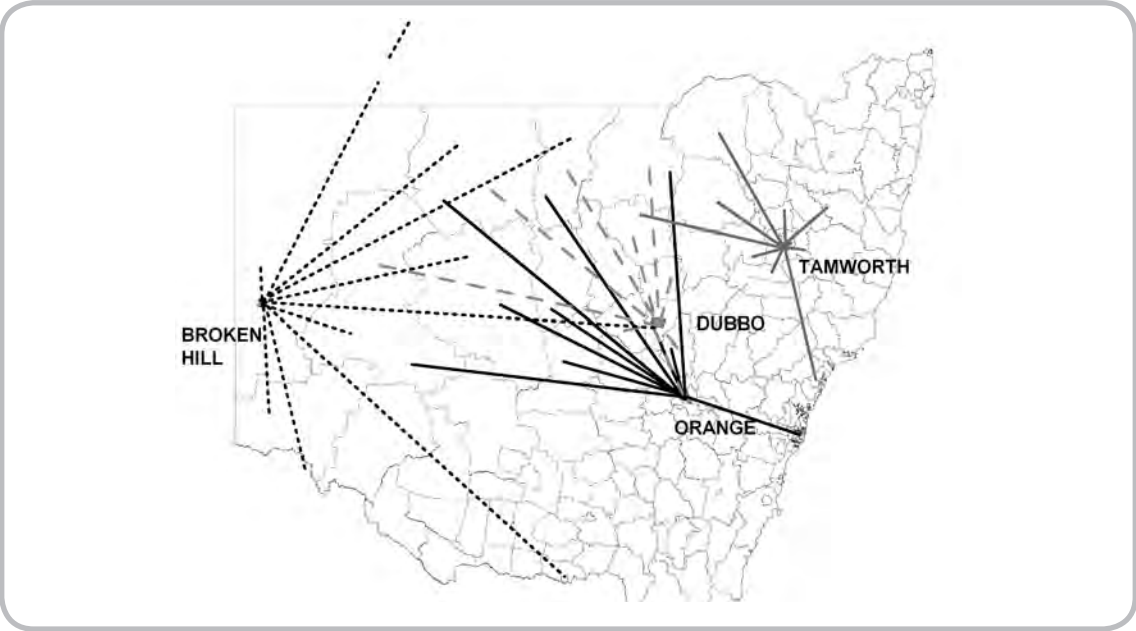
Source: ABS 2001 Census customised tables.

While these settlements remain far from being 'Indigenous' towns in the way that many smaller localities in the outback have become, it would appear that the attraction of Indigenous people to such localities has been occurring for some time, and that the long-run prospect for such places is for an increasingly prominent Indigenous profile. Assuming that these differential population dynamics between Indigenous and non-Indigenous residents continue (and there is nothing from demographic analysis to suggest otherwise), then this trend has major implications for the nature of services delivered in many of Australia's regional centres, as well as for the role that Indigenous residents will play in terms of their governance and economy.

The main dynamic leading to these divergent growth rates is differential net migration. To explore this further by age group, and to establish a measure of the direction of migration flows into and out of these regional towns, data for the six towns are considered collectively in Figs 12, 13 and 14. Clearly, from Fig. 12, Indigenous movers-in to these towns exceed movers-out at all ages and the biggest gap appear to be among younger adults aged 15–34 years. By contrast, non-Indigenous movers-out exceed movers-in, again at all ages with out-migration peaking among young adults in their twenties (Fig. 13). The net effects are shown in Fig. 14. Indigenous net migration gains are positive at all ages except among those aged 65 and over, while the non-Indigenous population experiences net migration loss at all ages, although again except among the oldest. While Indigenous gains peak at ages 20–29, non-Indigenous losses peak at ages 15–24.

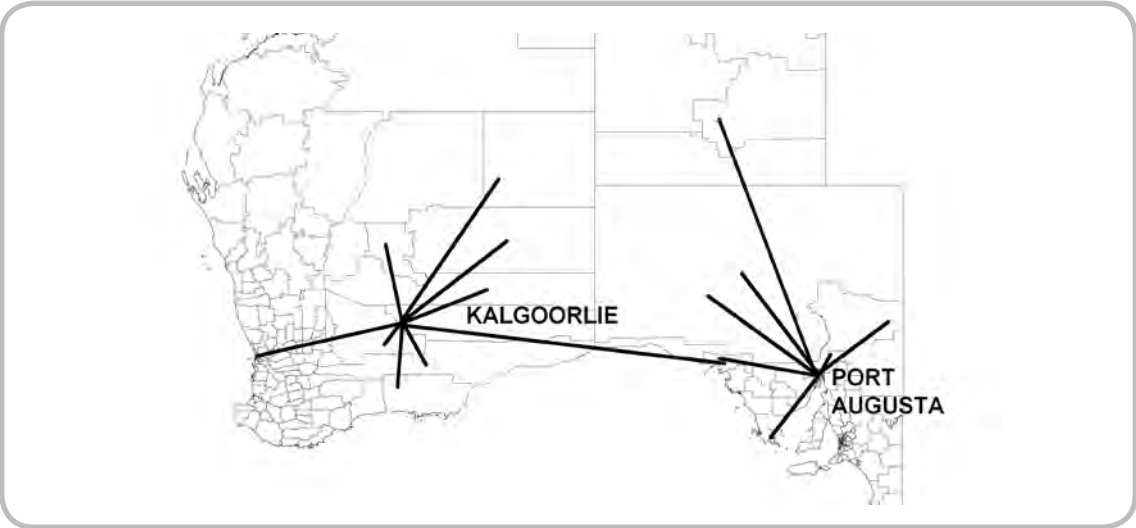
In terms of the origins of these Indigenous migrants into regional towns, it is interesting to speculate whether they form part of the general shift out of remote and very remote regions towards regional Australia that is

Fig. 15. Origins of Indigenous migrants to Broken Hill, Dubbo, Orange and Tamworth, 2001



Source: ABS 2001 Census customised tables.

Fig. 16. Origins of Indigenous migrants to Kalgoorlie and Port Augusta, 2001



Source: ABS 2001 Census customised tables.

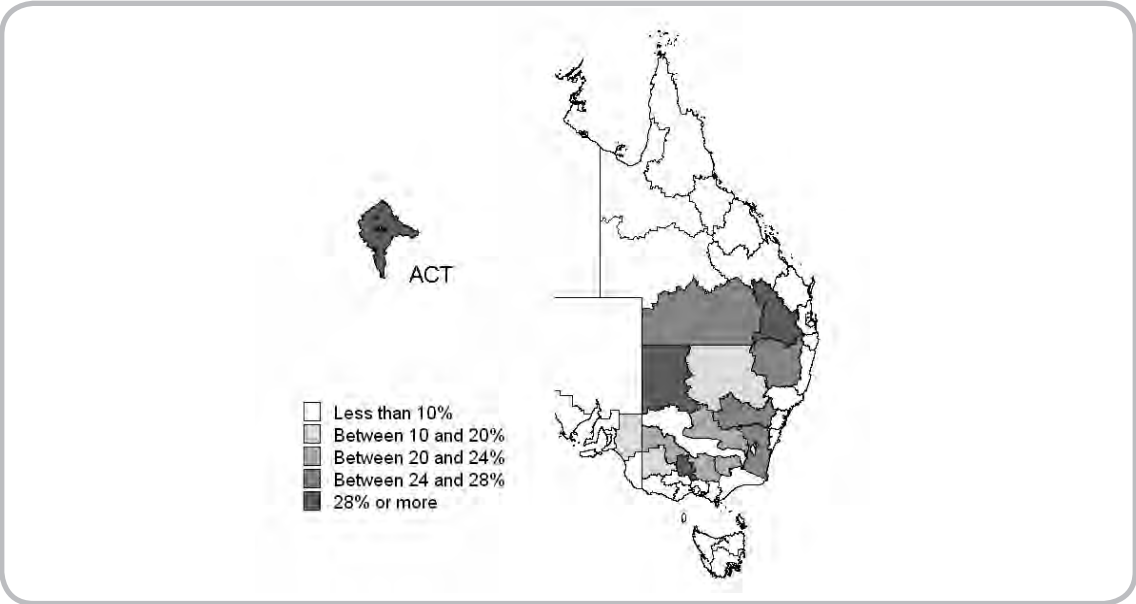
evident in Fig. 10. In order to consider this, Fig. 15 shows the origins (by Statistical Local Area) of the main flows of Indigenous migrants into Broken Hill, Dubbo, Orange and Tamworth, while Fig. 16 does the same for Kalgoorlie and Port Augusta. These diagrams show geographic pattern only with no weighting for the size of flows. What they all reveal is a distinct catchment area for each town drawing people primarily from western and northern origins and from smaller places, in a manner that tends to agree with the model of movement in Fig. 10. Thus, Dubbo and Orange clearly draw people out of remote areas of western and northern New South Wales, and Kalgoorlie and Port Augusta are clearly points of attraction for people living in the arid zone with the latter displaying links as far off as Alice Springs. Although this argument breaks down slightly since Broken Hill and Kalgoorlie are themselves located in remote Australia, the general notion of a step-wise movement up the settlement hierarchy appears to hold.

THE TORRES STRAIT DIASPORA

Despite official recognition of two Indigenous peoples in Australia—Aborigines and Torres Strait Islanders—there is a tendency in public policy formulation to consider these as a single group. This stems partly from their shared historic experience of marginal attachment to the mainstream economy, as well as common administrative arrangements developed over time to deliver welfare and social programs. Although Aborigines and Torres Strait Islanders are similarly disadvantaged in broad socioeconomic terms, when compared with other Australians, there are sufficient differences between them—in terms of culture, geographic distribution and in their manner of incorporation into wider institutional structures—to warrant some degree of separate analytical consideration. For example, compared to Aborigines, Torres Strait Islanders are more urbanised, more spatially concentrated, more likely to stay at school longer, and more likely to be in the labour force and employed (Taylor & Gaminiratne 1993). Such differences are partly derived from, and reflected in, recent patterns of Islander migration which have extended the Islander presence emphatically beyond the Torres Strait.

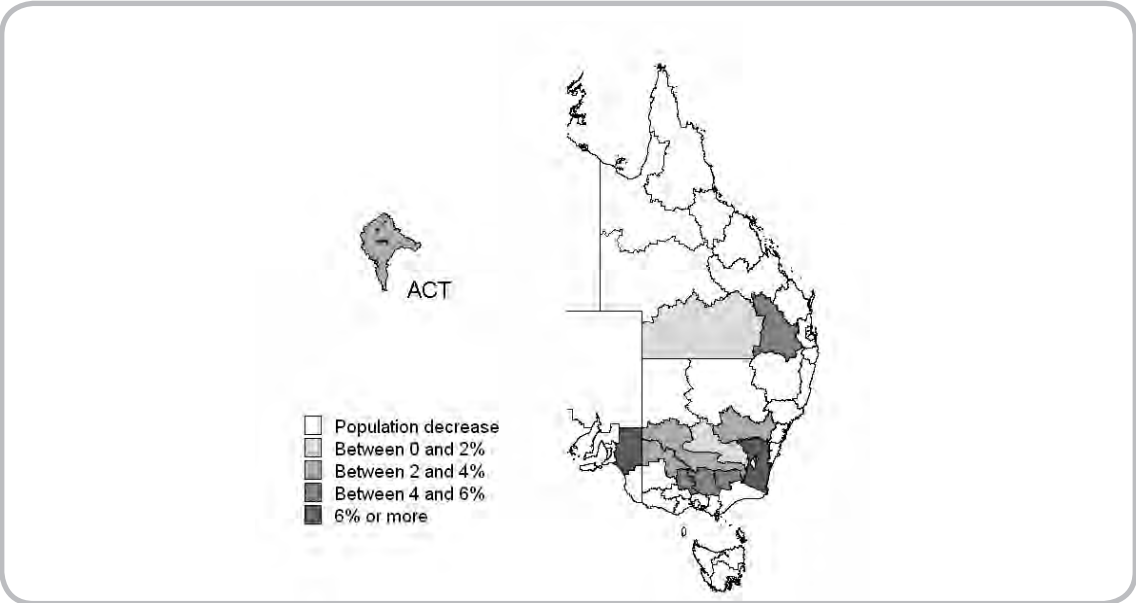
Until the end of World War II, Torres Strait Islanders were restricted by law and administrative arrangements to residing in the Torres Strait archipelago. This is despite notable exceptions, such as those Islanders who seasonally ventured further afield across northern Australia as crews on pearling luggers. Prior to 1945 there is little evidence of any permanent movement out of the Torres Strait, although during World War II a number of Islanders were evacuated to the mainland. Due to subsequent out-migration for employment, however, and the natural increase of the Islander population on the mainland, this pattern of distribution is now almost completely reversed. Today, 85 per cent of all Torres Strait Islanders are resident on the mainland. Furthermore, the pattern of settlement that has emerged from this redistribution is quite distinctive, being focused primarily on the State of Queensland, and the larger urban centres of north Queensland in particular, or otherwise biased towards metropolitan areas, especially in the eastern states. By virtue of their original location in a single place, the incorporation of Torres Strait Islanders into the wider economy has engendered if not a culture of migration, then at least a general perception that they are a highly mobile group (Taylor & Arthur 1993).

Fig. 17. Indigenous population growth in the Murray-Darling Basin, 1996–2001



Source: Taylor & Biddle 2004.

Fig. 18. Non-Indigenous population change in the Murray-Darling Basin, 1996–2001



Source: Taylor & Biddle 2004.

Not surprisingly, then, the term 'diaspora' has been used to describe the structural position of Torres Strait Islanders (Rowse 2002: 193). This term, which evokes the dispersal of population groups, emphasises the importance of maintaining and utilising social networks: within the communities of destination, within those organisations that maintain group identity, and between origin and destination areas. Rather than a move for settlement, from the point of view of diasporas, migration is more a transnational system of circulation (Skeldon 1997: 28–9), although within Australia, of course, this refers to internal rather than international mobility.

INDIGENISATION OF THE AGRICULTURAL ZONE: THE MURRAY-DARLING CASE

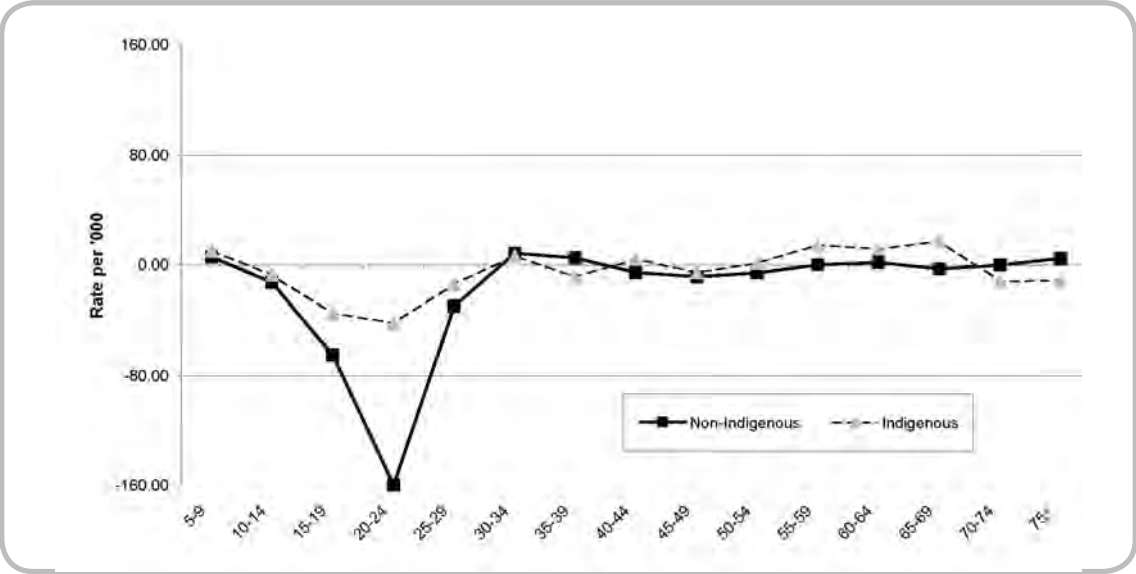
The same demographic trends leading to an enhanced Indigenous presence in many regional localities are also being played out at the broad scale across much of non-metropolitan Australia. A case in point is the recent experience across the Murray–Darling Basin. Despite decline and dispersal over many decades, Indigenous peoples form a sizeable and distinct component of the contemporary Basin population. As a consequence of differential migration, this presence is now being enhanced.

As the ecological foundation of Aboriginal livelihoods for millennia, the rivers, tributaries and floodplains of the Murray–Darling drainage system sustained population densities that were relatively high in continental terms up to the expansion of the European settlement frontier across the region in the nineteenth century and the consequent decline and dispersal of prior populations. Thus, from an Indigenous perspective, a proper demography of the Murray–Darling Basin commences well before European incursion into the region and seeks to reconstruct the impact of the latter. While this is not attempted here, what should be said is that population decline accompanied (even preceded) the invasion of Aboriginal lands in the Basin (Butlin 1983; Smith 1980a, 1980b), and that subsequent policies of assimilation produced upheaval and spatial fragmentation (Ball 1985; Castle & Hagan 1984; Rowley 1970, 1971a). Significantly, and notwithstanding this demographic history, the Indigenous peoples of the Murray–Darling Basin have continued in sufficient numbers and with on-going association with traditional country as to collectively form a sizeable and distinct component of the overall contemporary Basin population. As a consequence of differential migration, this presence is now being enhanced.

The percentage rate of change in the Indigenous estimated resident population across SDs of the Basin between 1996 and 2001 is shown in Fig. 17. The first point to note is that the Indigenous population increased in all regions. The second point is that growth rates varied considerably between different parts of the Basin with little discernable pattern. Very high growth rates of over 28 per cent were recorded in regions as varied as the Australian Capital Territory, the Darling Downs, far west New South Wales and the Loddon Valley in northern Victoria, while relatively low growth of only 4 per cent was recorded in the Murray SD which runs along the New South Wales bank of the river from Tumbarumba to Wentworth.

Apart from much higher Indigenous growth rates, the main point of contrast between Indigenous and non-Indigenous population change is the fact that the non-Indigenous population in many parts of the Basin

Fig. 19. Age pattern of Indigenous and non-Indigenous net migration between the Murray–Darling Basin and the rest of Australia, 1996–2001



Source: ABS customised tables.

has actually declined in recent years (Fig. 18). Thus, the great swathe of country across northern New South Wales from Tamworth to Broken Hill has experienced an overall decline in non-Indigenous residents, as has the Wimmera district of western Victoria. Elsewhere, growth rates were marginally above average, with the main exceptions being the stretch of Victoria from the Loddon to the Goulburn valleys, the Darling Downs in south east Queensland, and especially south east New South Wales around Canberra and the Murray lands of South Australia.

The main reason for the marked contrast in growth rates between the Indigenous and non-Indigenous populations of the Basin is differential net migration. Aside from south east New South Wales and the Loddon Valley area of Victoria all regions of the Basin lost non-Indigenous population due to net migration, with the heaviest losses (more than 10% of the population) experienced in far west New South Wales and south west Queensland. Overall, the net balance of non-Indigenous population exchange between the Murray–Darling Basin as a whole and the rest of Australia was 225,000 out and 194,000 in, leading to a net loss of 31,000 persons. However, the Basin also gained 28,000 non-Indigenous migrants from overseas between 1996 and 2001 (although almost half of these went to Canberra), and while these should also form part of the demographic balancing equation, what is not known for a calculation of net impact is how many prior residents of the Basin emigrated overseas. Either way, though, the result remains a net migration loss.

As with the non-Indigenous population, the overall exchange of Indigenous population between the Basin and the rest of Australia was negative but only slightly so, with some 6,100 Indigenous people moving in and

around 6,500 moving out, leading to a net loss of 400 persons. The pattern of net gains and losses between different regions of the Basin is quite striking. All the net gains in Indigenous population were confined to Victorian regions of the Basin, along the Murray Lands in South Australia and in south east New South Wales, while all the regions to the north of the Murray in New South Wales and Queensland experienced net migration loss (Taylor & Biddle 2004). Of course, as Fig. 17 reveals, this pattern of net migration loss did not impair Indigenous population growth, except perhaps along the New South Wales side of the Murray River.

Of particular interest for social and economic policy is the rate at which different age groups in the Murray-Darling Basin lose or gain population to/from the rest of Australia. This is shown for Indigenous and non-Indigenous populations in Fig. 19 and quite distinct patterns emerge. First of all, both Indigenous and non-Indigenous populations in the Basin experience a net loss of young people in the age group 10–29. However, the movement out to the rest of Australia of non-Indigenous youth is far greater especially in the age group 20–24. Thereafter, beyond age 30 net migration for the Indigenous population is more or less in balance with very slight non-Indigenous gains in the age group 30–39 and slight loss in the age group 40–54, while the Indigenous population displays slight net gains in the age group 50–69. This pattern of youthful out-migration of Indigenous people from non-metropolitan areas towards cities with a corresponding movement back again in later years has been noted before with access to jobs and training seen as contributing to movement into the city, and lower costs of family housing seen as stimulating a movement back in later years (Gray 1989).

For the non-Indigenous population of the Basin the substantial movement of younger people out of the region is no doubt associated with the general social attractions of city life along with education, training and job search. What is interesting in terms of long-term population replacement is the general lack of reciprocal movement back into the Basin in later years, leading to the prospect of progressive decline in the non-Indigenous population.

At the broad sub-regional level, the Indigenous share of population varies substantially across the Basin from less than 1 per cent in many parts of Victoria, between 1 and 5 per cent along the Murray and Murrumbidgee, to more than 8 per cent along the Darling and other northern river systems. As the scale of analysis is reduced further, particular parts of the Basin, and particular localities within it, are seen to be predominantly comprised of Indigenous people. For example, two-thirds of the population of Wilcannia (64%) is Indigenous, and increasingly so—a phenomenon reported for other centres along the Darling River (Ross & Taylor 2000). This emergence of Indigenous towns, and the rising Indigenous presence more generally, is significant in terms of the demand for specialised government services (education, training, employment services, housing, and health services) and a need to recognise and establish a place for Indigenous participation in the regional economy, given that Indigenous people are the more likely to retain a long-term residence in the region.

REMOTE INDIGENOUS POPULATIONS

By way of background, it is worth noting that parallels exist between the modern-day classification of remote areas and the historic distinctions drawn between 'colonial' and 'settled' Australia in recognition of the much higher proportions of Indigenous people in remote areas, and the somewhat different manner of their incorporation into wider social and economic structures (Rowley 1971). Indeed, away from the larger mining towns and service centres of the outback, reference has been made to the notion of Indigenous 'domains' in the sense that Indigenous people and their institutions tend to predominate (Sutton 1995).

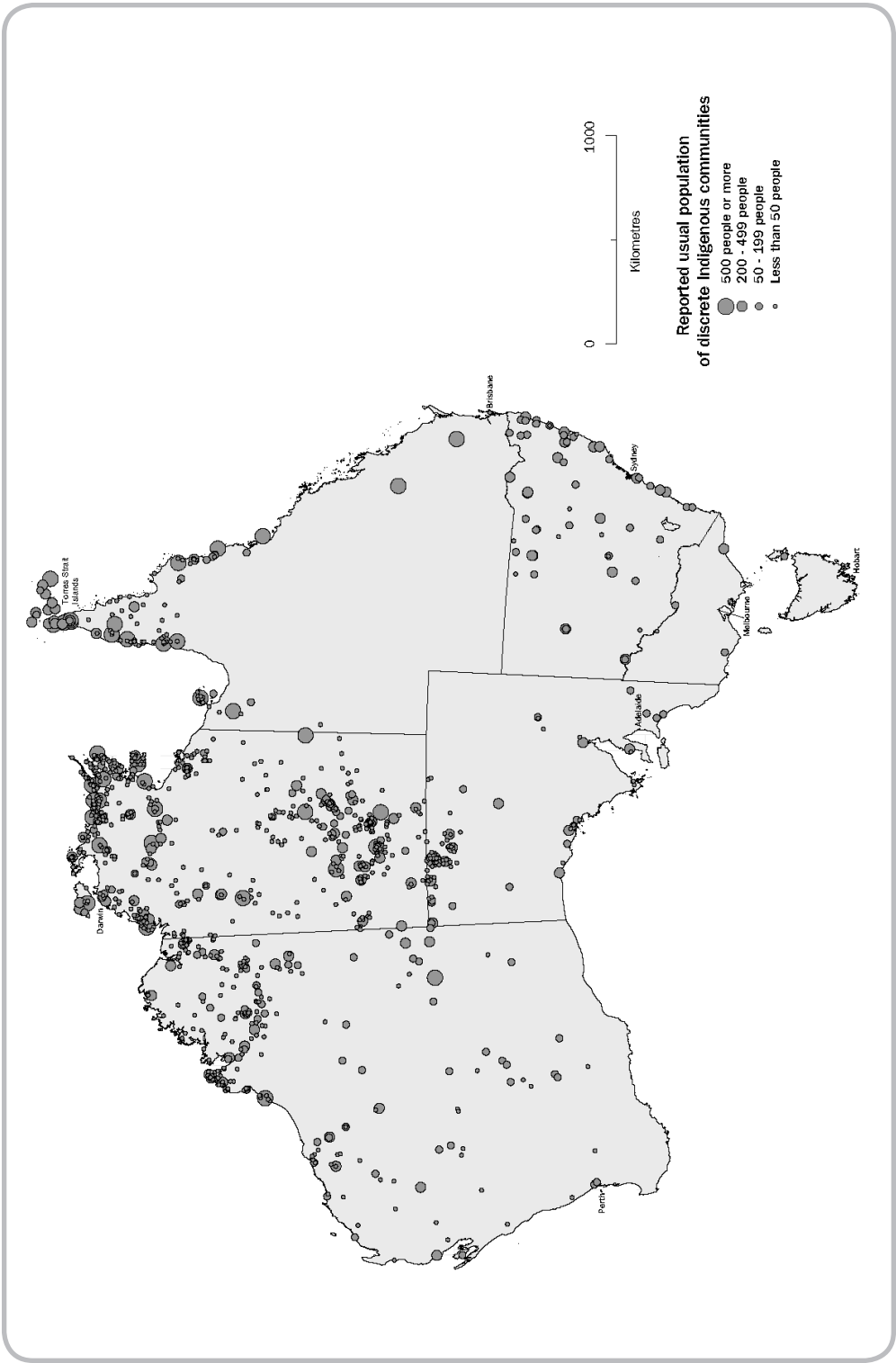
DISPERSAL TO OUTSTATIONS

This spatial framework provides essential context for understanding the substantial transfer of land back to Aboriginal ownership and stakeholder interest across remote regions that has occurred in recent times, with the prospect of more to come via land purchase and native title claims (Pollack 2001). One prominent long-term analyst of demographic trends in remote areas views this land transfer as an important element of the post-productivist transition in Australia's rangelands, with newly-recognised more culturally-based land values often lying outside the old economy (Holmes 2002). These values are manifest in the emergence of a distinct settlement structure on Aboriginal lands involving the formation of numerous, dispersed, small, Indigenous communities, especially in the Northern Territory, Western Australia and the far north of South Australia and Queensland.

Thus, for some decades now, demographic trends in remote Australia have been volatile. Since 1981, the Indigenous share of the total population within an area approximating the remote and very remote categories of the ASGC Remoteness Structure rose steadily from 12 per cent to almost 20 per cent in 1996 (Taylor 2003a). This occurred as a consequence of differential population dynamics—the Indigenous population is much younger in age profile, and has experienced a much higher rate of natural increase than the population in general. Also, as we have seen, many Indigenous people in remote areas reside close to customary lands that they own and their attachment to such places is reflected in a relative lack of net out-migration (Gray 1989; Taylor 1992b; Taylor & Bell 1996, 1999). This contrasts with the historically more recent and ephemeral non-Indigenous settlement of the outback with the experience of recent decades being one of an ageing population and generalised out-migration leading to population decline in many non-metropolitan districts (ABS 2002; Bell 1992, 1995; McKenzie 1994).

Since 1981, the Indigenous population in remote areas of Australia has grown by 23 per cent. By contrast, since 1986, overall non-Indigenous population growth in these areas has been negative (Taylor 2003a). Away from the larger mining towns and service centres of remote Australia, Indigenous peoples are increasingly the majority. This trend is leading to a rising Indigenous share of remote area population and there is every reason to expect that this will continue. Projections to 2016 of the Indigenous population in select regions across much of remote Australia indicate a rapidly growing Indigenous population in Cape York Peninsula, west Arnhem Land and the Gulf country of the Northern Territory, and more moderate, but nonetheless,

Fig. 20. Distribution of discrete Indigenous communities, 2001



Source: ABS, Canberra.

Table 10. Number of discrete Indigenous communities by settlement size and remoteness region, 2001

Settlement size	Major cities	Inner regional	Outer regional	Remote	Very remote	Total
1–19	0	0	6	33	577	616
20–49	0	1	8	36	228	273
50–99	1	7	13	17	64	102
100–199	3	5	12	9	51	80
200–499	1	6	11	11	77	106
500–999	0	0	0	1	17	18
1000+	0	0	3	2	16	21
Total	5	19	53	109	1,030	1,216

Source: ABS 2001 CHINS.

Table 11. Estimated population in discrete Indigenous communities by settlement size and remoteness region, 2001

Settlement size	Major cities	Inner regional	Outer regional	Remote	Very remote	Total
1–19	0	0	68	321	4,696	5,085
20–49	0	20	225	1,112	6,647	8,004
50–99	75	476	801	1,083	4,293	6,728
100–199	370	680	1,850	1,125	7,009	11,034
200–499	200	1,600	2,694	3,105	24,194	31,793
500–999	0	0	0	600	11,574	12,174
1000+	0	0	6,200	4,800	22,267	33,267
Total	645	2,776	11,838	12,146	80,680	108,085

Source: ABS 2001 CHINS.

sustained growth in the East Kimberley region and across the arid zone (Taylor 2003b, 2004; Taylor & Bell 2001, 2002).

Against this, population growth scenarios implied for the non-Indigenous component of the population in these same regions are in many instances negative, and at best (in the Kimberley and the arid zone) barely positive (Taylor 2003b, 2004). Thus, across the arid zone, the Indigenous population is projected to rise from 37,000 in 2001 to 45,000 in 2016 representing an increase in the regional share of total population from

20 per cent to 24 per cent (Taylor 2003b). In the combined regions across the wet tropics from Cape York to the Kimberley, equivalent projections indicate a rise in Indigenous population from 25,600 to 32,400 representing an increase in population share from 38 per cent to 42 per cent (Taylor & Bell 2001). Even in the more economically dynamic remote regions of the outback, such as the Pilbara, the Indigenous share of regional population is projected to continue rising from 16 per cent in 2001 to 18 per cent by 2016 (Taylor & Scambary 2005).

The opportunity to describe the emergent Indigenous settlement structure associated with this population growth is now available from the ABS CHINS which identifies the size (by estimated service population) of discrete Indigenous communities. In ABS parlance, discrete communities are defined as geographic locations that are bounded by physical or cadastral boundaries, and inhabited or intended to be inhabited predominantly by Indigenous people (more than 50%), with housing and infrastructure that is either owned or managed on a community basis.

The larger of these communities represent Indigenous living areas formerly constituted as government and mission settlements. The smaller ones are mostly outstation communities that had their origins in voluntary and spontaneous resettlement of Aboriginal country commencing in the 1970s—away from former mission and government settlements that had served to concentrate populations throughout the assimilation era of the 1950s and 1960s. These discrete settlements are located in all states and territories but are found overwhelmingly in Queensland, Western Australia, South Australia and the Northern Territory with major concentrations in central Australia, the Kimberley, the Top End of the Northern Territory and Cape York Peninsula, as indicated in Fig. 20.

As the product of administrative arrangements, or of Indigenous flight from such arrangements, these settlements required no modern economic base. They have not subsequently acquired such a base, at least not in a manner beyond the combined provisions of a sizeable state sector, a limited private sector, and variable (though largely unquantified) customary economic activities. The term 'hybrid economy' has been coined to describe this structural arrangement (Altman 2005).

Across the continent, a total of 1,216 such communities were identified in 2001 with a total reported (service) population of 108,085 (Tables 10 & 11). However, as Fig. 20 shows, the vast majority of discrete communities (1,187) are located in remote and very remote areas, and the combined population of these amounted to 92,826. One data item collected for each community by the CHINS was the location of the nearest town to which people usually travel for banking and major shopping services. Against these criteria, 1,055 communities were recorded in 1999 as physically distant from a service centre involving a combined population of 78,913. The balance of 132 communities and 9,810 persons were located within a local service centre.

For the first time these figures reveal the Indigenous base of the Australian settlement hierarchy. They identify some 80,000 Indigenous Australians who not only fall firmly within the definition of remote from a national perspective of service access, but are physically detached even within this area. On any objective statistical measure of accessibility these localities excel in their separation from mainstream economic and

Table 12. Discrete Indigenous communities isolated from service centres in remote Australia, by settlement size						
Settlement Size	Total		Remote		Very remote	
	Communities	Estimated population	Communities	Estimated population	Communities	Estimated population
1–19	555	5,483	71	642	484	4,841
20–49	275	8,150	34	915	241	7,235
50–99	69	4,581	4	250	65	4,331
100–199	48	6,618	6	750	42	5,868
200–499	77	23,700	7	1,785	70	21,915
500–999	16	11,023	3	1,650	13	9,373
1000+	15	19,358	0	0	15	19,358
Total	1,055	78,913	125	5,992	930	72,921
Source: ABS 1999 CHINS.						

social infrastructure. They are poorly connected to transport networks and often distant from even the smallest rural service centres. They are widely dispersed and small in size providing, individually at least, a limited market demand for goods and services.

One measure of market potential is provided by settlement size and Table 12 shows the distribution of remote area populations by settlement size for those communities physically removed from service towns. The first point to note is that the vast majority of communities (830 or 79%) are very small in size (less than 50 persons). Collectively, though, these small places account for only 13,633 persons, or 17 per cent of the total in remote and very remote areas. More importantly, from the perspective of service provision, is the fact that almost 61 per cent of the population located away from a service centre (50,000 persons) is in settlements of less than 500 persons, and the vast majority of these are in very remote areas. Such places are unlikely to have ever had direct access to services due to their small size, remote location, recency of establishment (in many cases) and institutional history.

At the same time, the point has long been made (Altman & Taylor 1987; Taylor 1992b; Young 1990) that individuals resident at outstations are highly mobile through a network of locations including large associated townships; it is misleading to treat outstation numbers as somehow detached from the rest of the world, existing in isolation from larger regional population groupings. From a planning perspective, it is these regional groupings that form the more rational basis for needs assessment, albeit involving different residential arrangements. In effect, outstations may be seen as equivalent to the rural living areas that have emerged around most Australian towns and cities encompassing individuals who display a preference for low

density living environments while still dependent on a more centralised service centre. The main difference is the scale at which this phenomenon occurs.

REMOTE LOCATION—ADVANTAGE OR DISADVANTAGE?

There is no disagreement that, against mainstream measures of socioeconomic wellbeing, Indigenous people in very remote areas show up as clearly disadvantaged. To explain this, some commentators increasingly focus on the constraints imposed by locational disadvantage (Gregory 2005; Hughes 2005; Johns 2006). These are unequivocal. However, this focus tends to overlook the extent to which human capital deficits are independent of location and simply reflect lifestyle choices made by Aboriginal people, choices that have been legally enabled by the granting of land rights as acknowledged by the 1999 review of the *Aboriginal Land Rights (Northern Territory) Act 1976* (Reeves 1998). Equally, there is a very real sense in which some economic activity has been stimulated by land rights, but generally in ways that are not amenable to measurement by mainstream social indicators or are simply not collected, at least not in a systematic fashion (Altman, Buchanan & Biddle 2006).

In this context, the notion that living on Aboriginal land has an adverse impact on economic and social standing is inaccurate. On the one hand, living in a remote area need not compromise formal employment prospects—after all a total of 236,845 individuals were employed across remote Australia in 2001. More importantly, however, the fact that mainstream measures of work and income do not accommodate particular lifestyle priorities of individuals living in different places is as crucial in understanding socioeconomic differentials as any constraints imposed by geography. This reflects a conundrum in the search for solutions to on-going disadvantage—land rights bestow a legitimate interest in remote residence away from the mainstream economy, but access to the mainstream is considered the key to better socioeconomic outcomes. Thus, in the Miller Report we find the following observation:

The option [of salaried employment] is not ... open to them [many Aboriginal people] and ... many of them reject it. In the more remote areas which were not colonised to the extent of others and where Aboriginal custom and law remain strong, people have removed themselves from the enforced change of life-style encompassed by a western-style economy ... and have chosen to maintain a life-style compatible with their traditional culture using a mix of components from their own traditional hunter-gatherer subsistence economy together with components of the wider market-based economy ... Not all Aboriginal people have the same concept of the mix of traditional Aboriginal and non-Aboriginal components in their life-style. Many of them who have chosen, or have felt compelled to live in an urban context, accept the employment for wage or salary basis for their livelihood to a greater extent than those who have remained in an isolated rural environment (Miller 1985: 5–6).

The negative consequences of locational disadvantage for Australians generally living in non-metropolitan regions has been of growing policy concern over the past 20 years or so (Holmes 1988, 2002; Logan et al. 1975). From this macro perspective, the populations resident on Aboriginal lands in the Northern Territory have been and still are manifestly among the most locationally disadvantaged in Australia. Not only do they

Table 13. 2001 census counts and Indigenous status by rural balance ^a				
	Non-Indigenous	Indigenous	Total	Indigenous %
New South Wales	528,056	12,404	540,460	2.3
Victoria	403,372	2,616	405,988	0.6
Queensland	456,608	11,150	467,758	2.4
South Australia	149,066	3,361	152,427	2.2
Western Australia	157,628	9,826	167,454	5.9
Tasmania	88,627	3,433	92,060	3.7
Northern Territory	17,254	13,655	30,909	44.2
Total	1,800,611	56,445	1,857,056	3.0
Note: a. Localities of less than 200 persons.				
Source: ABS 2003b.				

fall firmly within the definition of remote Australia as determined by the Commonwealth Grants Commission, they are physically detached even within this area. As we have seen, on any objective statistical measure of accessibility they excel in their detachment from mainstream labour markets and physical infrastructure. They are poorly connected to transport networks and often distant from even the smallest rural service centres. They are widely dispersed and small in size providing (individually at least), a limited market demand for goods and services.

Thus, from the bureaucratic perspective of those seeking to provide services and achieve social and economic equity and efficiency goals, such a focus by Aboriginal people on utilising and residing on Aboriginal lands may be construed as a retrograde step on the grounds that it serves to reinforce the locational disadvantage of an already severely disadvantaged group. From a more cultural perspective, however, remoteness is very much in the eye of the beholder and, notwithstanding their manifest isolation (some might argue because of it), an alternate view is often expressed by Indigenous people themselves (Smith & Claudie 2003).

To the extent that the achievement of uniquely Indigenous (and national) goals are attainable only by virtue of remote residence on traditional lands, the ongoing dispersion of population may be seen as a manifestation of Aboriginal perceptions of locational advantage. As such, this represents a spatial optimum in a locational trade-off that is aimed at balancing a range of cultural, economic, social and political considerations. Such a trade-off involves reduced access to urban-based mainstream labour markets, opportunities for education, training and income generation, as well as to better housing and other social facilities. In so far as these are perceived as losses, they are set against the not insignificant social, cultural and economic gains acquired from residence on Aboriginal lands. There are spin-offs too for national public policy with growing recognition of

economic benefits arising from Indigenous coastal surveillance, natural resource management, and fine art production, while improved health outcomes compared to conditions in major settlements have long been claimed (Burgess et al. 2005; Morice 1976; O'Dea, White & Sinclair 1988).

Although a good deal of public debate has recently emerged around the sustainability of outstation populations, there is nothing especially unusual, nor historically unique, about a group of Australians expressing a desire to live on the spatial margins, nor in the challenges presented to governments in supporting them to do so. After all, almost 2 million Australians currently reside in settlements of less than 200 persons, and only 3 per cent of these are Indigenous (Table 13). Where such localities are so small or distant that provision of a basic range of services is rendered difficult, innovative means of supplying these (such as School of the Air and the Royal Flying Doctor Service) have long been in operation. In fact, Australia is recognised internationally for its expertise and commitment in servicing small remote populations, an achievement based in no small measure by cross-subsidy.

THE GROWTH OF INDIGENOUS TOWNS

Writing in 1971 at the end of the assimilationist years of welfare administration, Charles Rowley (1971a: 362–4) described the myriad mission and government settlements across remote Australia as having been instrumental in frustrating urbanisation. In his view, they functioned as 'holding institutions' serving to prevent the inevitable migration of Aboriginal people to towns and cities (Rowley 1971b: 84). With the benefit of more than 30 years hindsight during which time Indigenous people have been free from the institutional and legislative shackles that governed their place of residence, this proposition is only partially upheld. While migration from the bush to towns and cities has undoubtedly occurred, the equally telling observation is that many remote settlements have continued to grow in size and complexity with several achieving the status of 'urban centre' within the ASGC. Among those with a population that now exceed 1,000 persons or are very close to it are the following in the Northern Territory: Wadeye, Maningrida, Nguiu, Galiwinku, Mililingimbi, Ngukurr (as well as Larapinta town camp in Alice Springs); and in Queensland, Aurukun, Palm Island, Yarrabah, Doomadgee, Mornington Island, Woorabinda, and Cherbourg. The current trajectory for these towns is for continued growth, in contrast to the fortunes of many other more mainstream country towns.

One interesting observation is that these large Indigenous towns tend to be located in the tropical north while similar former institutional settlements in central Australia do not appear to have achieved similar size or growth rates. Indeed, in the Centre, the pattern of settlement growth observed generally over the past 20 years is one whereby community populations tend to reach a population ceiling (typically between 250 and 500 people) at which point they either stabilise or fragment spatially and decline in size (Taylor 2001). In this region, population growth beyond this has generally been accommodated by the formation of new settlements, initially as satellite outstations, some of which have developed as separate entities. The reasons underlying this expansion of outstation residence across central Australia have been well canvassed (Blanchard 1987; Cane & Stanley 1985; Young & Doohan 1989). These include the capacity to

live in smaller, more politically manageable social units away from the social pathologies of overcrowded centralised settlements. There are, it seems, limits to growth for desert communities that are linked to issues of sociability and community cohesiveness.

Thus, contrary to the outback experience of the past two decades which has seen many country towns facing decline, an emergent public policy issue in the remote Indigenous domain, especially in the Top End of Australia, is how to accommodate (often literally) urban growth. A prime example, and likely to be representative of the situation in all the other towns listed above, is provided by the town of Wadeye in the Northern Territory. Established as a Catholic mission in 1939, this town and its hinterland has grown steadily ever since to reach a population of around 2,200 by 2005. On current trends, it is estimated to reach 3,800 by 2023. By that time and at this level, it would constitute the Northern Territory's fourth largest town behind Darwin, Alice Springs and Katherine. Presently, the population at Wadeye suffers an acute housing shortage with an average housing occupancy rate of 17 persons per functional dwelling. Unless a major upgrading occurs, the population growth trajectory means that Wadeye will be increasingly anomalous in the Australian settlement hierarchy for being a vibrant and growing small-sized country town yet missing significant elements of basic infrastructure and services normally associated with such places due to its legacy of mission, and then Aboriginal community-funding regimes. To shed some preliminary light on this issue it is worth attempting to profile, even in a crude fashion, just where Wadeye presently sits in the overall context of the Australian settlement hierarchy.

Across northern Australia, there appears to be a significant structural break in terms of the range and number of services and functions located in towns between settlements of up to 2,000 persons as opposed to those over this size and up to 8,000 persons (Hugo et al. 2001). Accordingly, we can compare the presence or absence of basic infrastructure and services in Wadeye with a mainstream town, also in remote Australia, of similar size (at least of a size that Wadeye appears to be heading for in the medium-term). For this purpose the town of Longreach is selected as a benchmark.

Longreach is a small service centre classified according to the ABS remoteness geography as 'very remote', as is Wadeye. Thus, like Wadeye, it is physically distant from other population centres and so from the full range of goods and services that such access provides. Presently, the estimated resident population of Longreach and its Shire has ceased growing and is stable at around 4,300. This places it in a category just above Wadeye within the north Australian settlement hierarchy, in terms of the expected range of services and functions it provides and performs (Hugo et al. 2001). However, these similarities of location and (future) size between the two places raise the question of what infrastructure and services are presently found at Longreach and what these might mean for likely future services and functions at Wadeye if it is to reach a comparable population over the next 20 years.

Taylor and Stanley (2005) have provided a very basic qualitative assessment of the difference in urban services and functions in the two settlements, though with no measure of any gaps in quality. However, even this simple analysis uncovers a number of the shortfalls that Wadeye might expect to make good as

it proceeds along its path to a higher population threshold within the settlement hierarchy. At the time of writing, among the key services, infrastructure and functions that were missing from Wadeye compared to Longreach were: a high school, boarding school, Technical and Further Education (TAFE) college, social clubs, sporting clubs, fire service, magistrate, newspaper, free to air television reception, mobile phone reception, resident doctor, hospital, retail pharmacy, multiple retail outlets, adequate public housing, private housing market, sealed urban roads, sealed access roads, and wet weather road access.

LABOUR DEMAND AND SUPPLY IN REMOTE AREAS

Until recently, many Indigenous adults in remote Australia in receipt of Newstart Allowances have been exempt from the work activity test on the grounds that suitable and sufficient employment is not locally available. While this latter is strictly true, it is nonetheless worth noting that a total of 236,845 individuals were formally employed across remote Australia in 2001. Of these, 27,050 were Indigenous and 209,795 were non-Indigenous. At these levels, the proportion of remote Indigenous adults employed was 42 per cent, and the non-Indigenous equivalent was 67 per cent. Clearly, then, there is a labour market in remote Australia; it's just that Indigenous people are relatively disengaged from it, especially when it is considered that CDEP accounts for the lion's share of remote Indigenous employment.

Reasons for this disengagement are varied, but interlinked. Many sites of employment are sporadically located over vast distances and not within the actual communities where Indigenous people live. Combined with this is the fact that Indigenous propensity to migrate in search of such employment is low (in contrast to non-Indigenous labour); this is low partly because individuals lack the necessary skills and work experience to acquire work. In turn, people possibly lack these skills because the Indigenous social order may allocate low priority to formal schooling relative to the pursuit of Indigenous social capital, although harder evidence is emerging to suggest that the resources necessary to cater for the educational needs of remote school age populations are not actually provided (Taylor & Stanley 2005). In any event, living conditions perpetuate high morbidity, disability, and custody rates all of which detract from meaningful engagement with the mainstream labour market, while some Indigenous people simply have a different outlook on what constitutes rewarding activity.

Relatively buoyant economic conditions do not necessarily guarantee that things might be any different, however. As a proxy for remote Australia, consider recent experience in the Northern Territory. During the 1990s, the Northern Territory economy out-performed the rest of Australia. Gross State Product (GSP) increased at an average rate of 6.1 per cent per annum, while employment rose at an average annual rate of 5.8 per cent (Northern Territory Government 2001: 17–23). Against this backdrop, and with government policies primed to assist Indigenous people into the workforce, one might have expected some enhancement of Indigenous employment status. In fact, in terms of mainstream employment, the relative labour force status of Indigenous people in the Northern Territory actually worsened.

Table 14. Indigenous adults by labour force category, Northern Territory, 1996 and 2001				
Labour force category	1996	2001	Net change	% change
Employed CDEP	4,044	5,165	1,121	27.7
Employed mainstream	5,492	4,994	-498	-9.1
Unemployed	2,071	1,601	-470	-22.7
Not in the labour force	15,862	18,813	2,951	18.6
Total (15+)	27,469	30,573	3,104	11.3
Source: Taylor 2003c.				

Table 15. Indigenous and non-Indigenous labour force status, Northern Territory, 1996 and 2001					
	CDEP ^a	Mainstream ^b	Unemployed ^c	Labour force participation ^d	Unemployed (including CDEP) ^e
Indigenous					
1996	14.7	20.0	17.8	42.2	52.7
2001	16.9	16.3	13.6	38.4	57.5
Non-Indigenous					
1996	n/a	74.4	5.8	79.0	N/a
2001	n/a	75.0	5.0	78.9	N/a
Notes: a. Census-based CDEP employment as a percentage of the 15+ population. b. Census-based non-CDEP employment as a percentage of the 15+ population; c. Census-based unemployed as a percentage of the labour force. d. Labour force as a percentage of the 15+ population. e. Census-based unemployed plus CDEP as a percentage of the labour force.					
Source: Taylor 2003c.					

As shown in Table 14, the only growth in Indigenous employment between 1996 and 2001 occurred in the CDEP scheme, with Indigenous numbers in mainstream (non-CDEP) employment actually falling from 5,492 to 4,994. The impact of this is seen in Table 15, with the proportion of Indigenous adults aged 15 years and over employed in CDEP rising from 15 per cent to 17 per cent, while the proportion in mainstream employment fell from 20 per cent to 16 per cent. The CDEP scheme thus overtook mainstream employment as the primary employer of Indigenous people in the Northern Territory. This trend is amplified if the number of CDEP participants recorded by ATSIC in August 2001 (at 7,362) is accepted in place of the census-based count of 5,165.

It is also likely that the decline in the number recorded as unemployed between 1996 and 2001 reflects a category shift out of 'unemployment' to 'employment' created by an expansion of CDEP scheme participation, in combination with the enforcement of stricter work requirements for CDEP participants following the review of the scheme in 1997 (Hunter & Taylor 2001: 118). This sort of category shifting can produce quite variable outcomes. For example, if all CDEP scheme workers were classified as unemployed (on account of the hypothetical link between funding for the scheme and Newstart Allowance), then the Indigenous unemployment rate in the Northern Territory would have risen from 53 per cent of the labour force in 1996 to 57 per cent in 2001 (Taylor 2003c). The apparent 'drop' in the Indigenous unemployment rate shown in Table 15 should also be placed in its full context: Centrelink records reveal that as many as 7,500 Indigenous adults in the Northern Territory were in receipt of Newstart Allowance at the time of the 2001 Census. Thus, census unemployment figures probably reflect genuine job seeking activity, as many of those on Newstart Allowance are exempt from the activity test. Clearly, the labour force model underlying the terms 'unemployment' and 'labour force participation' is misleading in the many parts of the Northern Territory where mainstream labour market opportunities are relatively absent.

The final observation concerns those not in the labour force. This number increased substantially between 1996 and 2001, with the result that the Indigenous labour force participation rate dropped from its already low level of 42 per cent to 38 per cent. One possible reason for this—increased participation in post-secondary education—can be discounted, as the number of Indigenous people recorded by the census as attending TAFE, university or any other post-secondary educational institution barely changed between 1996 and 2001. Of equal note is the fact that Indigenous labour force participation is low at all ages, in striking contrast to the non-Indigenous adult population (Taylor 2003c). Only among Indigenous males in the prime working age group of 25–49 does the labour force participation rate rise above 50 per cent. But in this age range, the comparable rates for the non-Indigenous population stand at well over 90 per cent.

The simple fact is the mainstream labour market in remote Australia is tightly circumscribed. According to Hunter (2004), the distribution of employment for both Indigenous and non-Indigenous workers in remote areas is quite distinctive, with a high concentration of jobs in relatively few industries and occupations. Indeed, if we leave aside activities associated with the provision of government services, the main private sector industries in the bush are agriculture and mining with key components of these (such as iron ore extraction, gold mining and beef cattle farming) accounting for fully one-third of non-Indigenous private

sector jobs and one-quarter of Indigenous private sector jobs (Hunter 2004: 54–5). One remote region that epitomises this labour market mix is the East Kimberley in Western Australia.

Argyle Diamond Mine: the impact of positive engagement

In recent years, business units within the Rio Tinto mining group have actively sought to enhance their level of Indigenous employment with a focus on recruitment from within mine hinterlands, in accordance with newly adopted goals of corporate social responsibility (Harvey 2002; Harvey & Brereton 2005). Somewhat ironically, given its fraught history of relations with the regional Indigenous population, the Argyle Diamond Mine (ADM) in the northern East Kimberley region is a leader in this activity.

For the most part, since the commencement of operations in 1983, Indigenous people comprised only a small fraction of the ADM workforce. From the first intake of 14 Indigenous workers in 1985, accounting for 2 per cent of the workforce, the number of Indigenous people employed on-site and their proportional share of the on-site workforce rose to an initial peak of around 10 per cent in the early 1990s, only to fall away again to around 4 per cent by the end of the 1990s (Taylor 2004). However, since 1999, with the introduction of company plans to enhance Indigenous employment the numbers have steadily increased again. The initial target of having Indigenous employees comprise 15 per cent of the total workforce by 2005 was already exceeded in 2003. By October 2004 the total workforce amounted to 717, and 147 (20%) of these were Indigenous. Buoyed by this success, the targets for Indigenous employment have now been revised and current planning has set a target of 40 per cent by 2008—a proportion that would convert to around 200 Indigenous employees. Part of this increase in both overall and Indigenous numbers reflects the increased use of locally-contracted labour from labour hire companies within the East Kimberley with the result that almost all Indigenous workers are now sourced locally. In the meantime, as with many such mines in remote Australia (Storey 2001), the bulk of the mine workforce remains fly-in/fly-out (FI/FO) from Perth, though very few of these are Indigenous.

This current situation represents the high watermark of Argyle operations in terms of workforce size and composition. With underground mining set to proceed, this will involve overlapping construction phases leading to underground production alongside an extension of pit operations. It will result in a rapid winding back of the FI/FO workforce to just 20 per cent with the bulk of the workforce sourced locally from within the mine hinterland (an area based on a radius of reasonable weekly commuting time that extends north to Wyndham, to the south of Halls Creek, and as far west as Fitzroy Crossing). As part of this restructuring plan, ADM aims to ensure that at least 50 per cent of this locally-recruited contingent is made up of Indigenous workers. This represents a significant break with the past practice of long-distance extra-regional commute mining and has the potential to raise the regional economic multiplier effects of employment at ADM.

Although the future size and composition of the site-based workforce under the proposed underground mining phase is currently in design, the period up to 2012 will see substantial variation in workforce numbers before greater stability resumes as the focus shifts solely to underground production and ore processing through to 2020. As Indigenous employment targets are based on a proportional share of the

total workforce, eventual numbers arising from these developments are thus equally uncertain for a period, but from around 2013 the size of the locally-recruited workforce is estimated to be around 320. If half of these are Indigenous, as planned, then this would translate into some 160 Indigenous workers for the rest of the decade to 2020. Compared to just 48 Indigenous workers in 2001, this projected rise to 160 by 2013 and beyond represents a substantial proportional increase; numerically, however, it is relatively small—an increase of just 112.

To consider the impact of ADM's very successful engagement strategies on regional Indigenous labour force status we have to consider demographic parameters. The fact is, because of the relative balance between projected population growth and anticipated employment growth in remote regions such as the East Kimberley, even if the substantial ADM employment targets for local Indigenous people are met this will not be sufficient to effect any noticeable change in the local Indigenous employment/population ratio, and if CDEP scheme employment is discounted then the ADM targets are definitely insufficient to impact on regional labour force status with the result that this will worsen. In terms of actually improving Indigenous labour force status to anything approaching the norm for non-Indigenous residents of the region, this task is way beyond any impact that could emanate from employment at the mine site alone.

The point here is that even where industry does make concerted and successful efforts to engage local Indigenous labour in remote regions, the enormity of the task in hand to accommodate a growing population means that impacts on regional social indicators will be minimal at best. At the very least, it is clear that all sectors of regional labour markets will need to be opened up as potential avenues for increased Indigenous employment with the same drive and purposeful manner as displayed at ADM. This is particularly so among major regional employment sectors such as tourism, agriculture, retailing, and state government services from which Indigenous people are notably absent. Assuming this were to happen, a related question concerns the capacity of local labour supply to match demand. To explore this issue in more detail, we turn to the current boom in mining-related employment in the Pilbara region.

Indigenous labour demand and supply in the Pilbara

While the Indigenous population of the Pilbara has grown steadily over the past couple of decades, the non-Indigenous population (being an essentially migrant-based group) has waxed, then waned, and waxed again in response to the cycles of regional economic fortune (Taylor & Scambary 2005). After rising to a peak in the mid-1980s, the non-Indigenous population declined for more than a decade, but has recently revived again due to increased mining activity. Over the same period, the Indigenous population has steadily grown. Consequently, from being just 9 per cent of the Pilbara resident population in 1981, Indigenous people presently account for 16 per cent of the total, and are projected to comprise 18 per cent by 2016. It is actually growth in the Indigenous population that has provided a brake on regional population decline for much of the past two decades.

Despite their significant role in sustaining regional population growth, a recent study of Indigenous labour force participation focused on the impact of the current boom in mining activity in the Pilbara reveals

that little has been achieved over the past four decades in terms of enhancing Indigenous socioeconomic status in the region (Taylor & Scambray 2005). However, on the basis of planned economic development and corporate interest in pursuing Indigenous engagement, progress is now possible but major efforts are required from all three broad stakeholder groups (Indigenous organisations, miners and governments at all levels) in order to ensure that this occurs. The primary dynamic dictating this imperative is the sustained Indigenous population growth against a background of low Indigenous economic status and limited human capital for mainstream economic participation.

Despite 40 years of large scale mineral extraction and associated expansion of economic activity in the Pilbara region, the labour force status of Indigenous Pilbara residents has barely altered. While the numbers in work have undoubtedly increased, so has the size of the working-age population, although this still numbers just 4,800. As a proportion then, the Indigenous employment rate remains well below 50 per cent. This contrasts sharply with the rest of the Pilbara population whose primary reason for being in the region is to work. It is even more stark when set against the FI/FO and temporary components of the regional workforce whose social and economic allegiances lie elsewhere—a situation not lost on many local Indigenous people.

A number of crucial policy questions arise out of this situation. First of all, is the local supply of Indigenous labour sufficient in size to meet the employment targets that have been set? Second, even if it is, what is the composition of potential labour supply in terms of human capital and related work-readiness? Finally, if there are shortfalls in the latter, what is the scale and nature of intervention necessary to raise the level of Indigenous economic participation?

There is a further question that is more universal in scope than the specifics of labour force participation, but it nonetheless arises out of the poor employment status that has been revealed because of the links between this, low incomes, and consequent high welfare dependency. This issue concerns the cost to government, and to people themselves, if social and economic conditions remain the same as currently experienced. Basically, the impost in terms of providing income support and other welfare payments, as well as program support in areas of health, housing and CDEP in particular, and the endless churning through the criminal justice system, will simply escalate in line with the growth in population. On the other hand, if Indigenous people had more jobs at higher occupational levels, then they would be able to meet many of the basic needs that governments now provide from their own incomes, with the added bonus that many of the more negative fiscal expenditures would diminish.

Some estimate of this opportunity cost to government of simply continuing business as usual is available in the form of welfare dependency rates and associated estimates of dollar amounts. What is not costed is the potentially greater public impost due to excess disease burden, infrastructure replacement, and foregone educational outcomes due to the continued and growing marginalisation of Indigenous people within the regional economy. It is important to recognise that the policy options for addressing this situation are not cost neutral—expenditure will grow either in response to declining economic status, or in order to enhance it. Whatever the case, a fiscal response is unavoidable.

An essential component of the drive to open up areas of the regional labour market to Indigenous employment is the need to tackle much deeper structural hurdles if Indigenous people are to successfully compete for skilled mainstream jobs with other residents (and potential in-migrants, both Indigenous and non-Indigenous). These include poor literacy and numeracy levels, which in part reflect low school participation and attendance levels. Note also the continuing high adult morbidity and mortality—if a 15 year old Indigenous male in the region has only a 50 per cent chance of reaching retirement age, then the physical limitations on prolonged and full participation in the workforce become all too apparent, especially if we add to this the high rates of morbidity and disability that are prevalent throughout the prime working ages. One very practical implication of this premature mortality is a reduction in lifetime earning capacity, including the accumulation of superannuation. This diminishes the ability to accumulate assets and reduces the flow of intergenerational wealth, thereby perpetuating poverty.

In pursuit of a social licence to operate, major mining corporations are already active in engaging Indigenous workers. The targets they have set to enhance the level of Indigenous employment would effectively double the number of Indigenous people employed full-time in the mainstream Pilbara labour market. However, despite this unprecedented labour demand, the capacity of local Indigenous people to benefit remains substantially constrained by their limited human capital. Mining employment is not the preferred option for all in the region, with other options and priorities expressed for participation in the regional economy. The point here, though, is that wherever participation is sought via the mainstream labour market, then many in the Indigenous population will continue to experience structural disadvantage in the absence of substantially enhanced intervention to redress historic exclusion.

In effect, if Indigenous mining employment targets were to be met, then the available supply of locally employable labour would likely be exhausted without substantial further investment in remedial training and possibly lowering of basic 'fitness for work' requirements. Even then, if current targets were to be achieved, the additional jobs created in fulfilling employment quotas would suffice only to keep pace with the growth in Indigenous working-age population. Thus, while much might be accomplished in terms of enhanced Indigenous engagement by the mining sector in the years ahead, little might be discernable in terms of overall regional economic status with a large component of the population remaining detached from mainstream opportunities.

The constraints on participation implied by this scenario range across the spectrum of social and economic conditions. To indicate the scale of some of these that relate to labour force exclusion, Table 16 provides select population estimates for 2006, bearing in mind that the adult population is estimated to be 4,800. What this reveals is that the vast majority of Indigenous adults in the Pilbara do not have full schooling or a qualification, around half of adults remain outside the labour force, many are hospitalised at any one time, others are subject to chronic conditions requiring strict management regimes, many again (especially young males) are arrested and incarcerated, and feeding into this adult realm are relatively low achievers from the education system. In any event, the potential for prolonged and productive workforce participation on the part of young people is severely curtailed by premature mortality.

Table 16. Summary of select Indigenous indicators of the scale of labour force exclusion, Pilbara region, 2006

Population aged 15+	4,800
With no post-school qualification	4,200
With less than Year 10 schooling	1,500
Not in the labour force	2,190
Hospitalised each year (all Indigenous persons)	2,800
Has diabetes (25 years and over)	1,020
Has a disability	1,020
Arrested each year	1,050
In custody/supervision at any one time	310
Achieving Year 7 benchmark literacy (current school attendees)	60%
15 year old males surviving to age 65	< 50%

Source: Taylor & Scambary 2005.

From a policy perspective, levels of economic exclusion on the scale indicated here raises questions about the adequacy of government resourcing to meet the backlog of disadvantage that has so obviously accumulated in the Pilbara region. Analysis elsewhere in remote Australia has found such resourcing to be substantially wanting in important areas of capacity building such as education and training (Taylor & Stanley 2005).

CONCLUSION

There is compelling need for fresh perspective on the policy implications of Indigenous demographic trends. Current frameworks for considering the structural situation of Indigenous peoples are increasingly focused on state and territory jurisdictional levels. While this may ease access to data and help in the determination of federal/State responsibilities, it provides little guidance regarding the spatial underpinnings of Indigenous disadvantage. It prevents consideration of policy issues and dilemmas in terms of their contextual site and situation.

The structural circumstances facing Indigenous populations are increasingly diverse and locationally dispersed, leading to variable constraints and opportunities for social and economic participation. This paper has explored key aspects of this diversity by bringing together the findings of recent regional and community demographic studies. The outcome has been to highlight what, for want of a better term, might be described as emerging demographic 'hot spots' in the sense that particular Indigenous population

dynamics in particular regions are giving rise to particular issues of public policy concern. Along the way, several key features of Indigenous demography provide the essential backdrop:

- **Size.** Following major disruptions due to colonisation, the enumerated Indigenous population is symbolically approaching 500,000—roughly what it was estimated to be at the time of first European settlement. However, with a continuing youthful age profile, an expanding population pool due to out-marriage, and substantial room for improvement in life expectancy, the Indigenous population is guaranteed to increase way beyond the numbers estimated as present at the onset of colonial settlement.
- **Distribution.** Despite the historic shift in Indigenous population distribution to urban locations, Indigenous people remain far more likely than other Australians to reside away from cities, and especially in remote areas. Indigenous people account for almost half of the resident population across three quarters of the continent and their share of this population is rising.
- **Composition.** While the nation is increasingly focused on the consequences of an ageing population and the means to finance and service retirees, the Indigenous population will remain relatively youthful due to higher fertility and premature mortality. Most Indigenous people barely reach retirement age, and their concerns are at the opposite end of the social policy spectrum to do with child health, education, criminal justice (especially in relation to youth), transition to work, family housing, and asset accumulation.
- **Mobility.** On average, Indigenous people engage in residential relocation at least as much as the rest of the population, though far more so in and around major cities, and far less so in remote areas. Movement to urban areas continues but is accompanied everywhere by high population turnover, especially in remote areas.

One factor that is stressed in terms of population dynamics is a need for forward thinking and to anticipate emerging needs and hopefully respond to them before they are realised. This capacity to project future scenarios is an essential adjunct to the portrayal of current circumstances. All too often in Indigenous affairs, policy has been 'reactive' by responding to historic levels of need, thereby creating a constant sense of catch up. What is required if policy is to be an effective catalyst for change is a 'proactive' methodology which seeks to anticipate and plan for expected requirements—essentially a means of translating the content and intent of policies into a required quantum of program and Indigenous partner commitments over given timeframes.

URBANISATION

While a shift in distribution away from remote and rural areas in favour of urban and metropolitan centres, has been one of the more visible post-war Indigenous population transformations, in recent decades ethnic mobility, as opposed to spatial mobility, has contributed just as much to increased urban numbers. Indeed,

despite net migration loss, some cities still display high population growth way beyond natural increase. For example, in the first half of the 1990s, the metropolitan area of Sydney experienced a 31 per cent increase in its Indigenous population despite experiencing substantial net migration loss. This reflects increased Indigenous identification in census counts in cities. Combined with the fact that cities generally display the highest population turnover, and also record the largest shifts in Indigenous census identification, this creates substantial demographic upheaval and, by the time planning processes emerge out of the census, the individual targets of social policy are likely to have changed.

Equally true is the fact of high population turnover between cities and their hinterlands, so much so that Indigenous people in the city are not just similar to those in country areas—to a large extent they are the same people spatially displaced at different stages of their lives. Consistently, over the past 20 years, net migration gains to cities have been concentrated in the 15–29 age group followed by net migration loss in most cities at older ages. Common determinants cited for this life-cycle pattern are education, training and job search, the pull of family, and the much greater reliance of Indigenous people on rental accommodation. This tends to undermine classical models of migration that portray migrants as income maximisers in undifferentiated labor markets. That is not to say that job search and depressed economic conditions in rural communities have not been significant stimulants to post-war Indigenous urbanisation, but even here emphasis can be placed more on the strength of government agency in directing or enabling migration flows, rather than on individuals as free agents. Alternate economic approaches that relate mobility to risk minimisation within highly segmented labor markets present a more realistic framework for Indigenous populations, as they highlight the distinctiveness of Indigenous economic participation, mostly in secondary labor markets, and give prominence to the role of social networks in facilitating movement. Given the persistently low socioeconomic status of Indigenous peoples in Australia, the relationship between marginalisation and mobility is becoming a key public policy question basically around the conundrum of whether Indigenous mobility reflects socioeconomic status, or socioeconomic status reflects mobility.

LOCATIONAL DISADVANTAGE IN CITIES

While some relationship exists between Indigenous socioeconomic status and location in the Australian settlement hierarchy, in the local context of access to resources and capacity for social and economic participation often what is more important is the outcome relative to other people in the same location. On this basis, Indigenous people as a group are substantially disadvantaged relative to their non-Indigenous counterparts at each level of the settlement hierarchy, regardless of location.

It is well documented that Australian cities are spatially diverse in terms of the socioeconomic status of neighbourhoods and suburbs. A number of studies identify Indigenous status as one persistent factor underlying this. The reason is that Indigenous people are over-represented in the poorest city neighbourhoods and this pattern appears to be very stable over time despite substantial growth in the major urban population. Moreover, within these poorest neighbourhoods Indigenous people continue to display the worst economic outcomes.

By grouping major urban census collection districts (CDs) and assigning these an index of socioeconomic status, it is found that the proportion of the Indigenous population is highest (around 25%) in the 10 per cent of CDs that have the lowest socioeconomic status and that this proportion declines steadily with increasing neighbourhood status. More importantly, no change in this pattern is discernable over the decade between 1991 and 2001. If anything, Indigenous people have comprised a progressively rising share of total population in the lowest status neighbourhoods and a falling share in middle-ranked neighbourhoods. Thus, despite substantial increase in the Indigenous population in major cities, there has been no aggregate social mobility with spatial disadvantage seemingly entrenched.

TEMPORARY MOBILITY

One characteristic of the Indigenous population that is widely acknowledged as having implications for the delivery of health, housing, employment, education and training services is a propensity for frequent mobility over the short-term. This is because of the impact that population shifts may have on the level and composition of service demand and usage in different localities. At the same time, very little is known in a comprehensive way about the scale, direction and pattern of such mobility, or about the characteristics of those involved. The fact is, policy makers who contemplate the effects of temporary mobility on the spatial pattern of demand for services do so in an information vacuum.

The basic policy issue at stake is how to most effectively plan for a population that is frequently mobile. How is the need for services best defined and provided for when individuals often shift their place of residence, even within the same locality? Which population should be employed as the base when considering such issues as overcrowding in dwellings, the demand for schools, or need for health services? To begin to answer such questions, there is a fundamental requirement for information indicating the volume, pattern and duration of short-term population movements.

Much temporary movement is generated by a spatial dichotomy between the concentration of services and dispersion of population with the result that regional centres, especially in remote Australia, are net recipients of temporary migrants. Many of the issues that arise as a consequence find their expression in Aboriginal living areas, or 'town camps', within remote regional towns. While this term has persisted, many such localities are in effect now residential suburbs although the levels of infrastructure available, the management regimes, and legal tenure of such sites invariably remain at variance with the rest of the urban centre.

As the necessity for short-term movement into regional towns has grown, questions are emerging about the adequate measurement of demand on town camp infrastructure and services. Census counts alone fail to capture this and the short-term nature of much movement leads to substantial underestimation of demographic impacts. At the very least, in planning for service provision recognition needs to be given to the role that central places fulfil on behalf of adjacent hinterlands. Many so-called transients are, in fact, relatively long-stayers, and while such people may ultimately recognise a rural community as home, there are pressing issues regarding their service requirements whilst away.

SPATIAL REDISTRIBUTION AND THE SETTLEMENT HIERARCHY

In the analysis of Australian population movement most attention to date has been focused on redistribution by state and territory given the requirements of fiscal federalism. From a social policy and social science perspective, it is more important to identify movements that create a change in the structural circumstances of migrants vis-à-vis proximity to labour markets and associated life opportunities. One aspect of the latter that is grossly under-researched is movement between various levels of the Australian settlement hierarchy. Capacity to explore this is provided for the first time by the remoteness categories of the ASGC.

This paper provides new data on propensities to move by age and sex for each of the five broad remoteness categories in this classification. For the population as a whole, the peak in the age profile of migration in the young adult age range reflects the influence of life-cycle events including departure from the parental home, start of tertiary education and training, entry into the labour force and the establishment of independent living arrangements. Broad agreement in this patterning of migration by age suggests that similar influences also bear on the Indigenous young adult population. To the extent that such factors are influential in stimulating Indigenous mobility, it is interesting to note that movement intensity varies substantially according to remoteness region. In major cities, Indigenous people are far more mobile than non-Indigenous people at all ages. However, as we move away to very remote regions, the marked peaks in the age profile of Indigenous mobility are seen to progressively diminish to the point where age has no effect at all on mobility in very remote areas and the overall level is very low. In contrast, non-Indigenous mobility rates are unaffected by location, although especially high rates in the 20–34 year age group are evident in remote areas due to movement for employment.

This leads to the question of whether Indigenous people are moving to more accessible areas. Overall, the answer is yes. The direction of net migration flows between 1996 and 2001 for both Indigenous and non-Indigenous populations shows a clear net movement up the settlement hierarchy away from remote areas towards regional areas and major cities. However, there are significant differences in the intensity of Indigenous and non-Indigenous flows that have important consequences for relative spatial redistribution. Remote and very remote areas experience Indigenous net migration losses, while regional areas and major cities all record Indigenous gains. While remote areas also experience non-Indigenous net loss, this occurs at more than twice the rate of that recorded for the Indigenous population. Outer regional areas also show non-Indigenous net loss. Combined with higher Indigenous natural increase, the effect of these migration differentials is to increase the Indigenous share of population in the remotest three categories of the ASGC. As for the pattern of interregional movement, Indigenous flows away from remote areas are more likely to be focused on outer regional areas. In turn, outer regional areas are more likely to lose Indigenous population to inner regional areas. This pattern is suggestive of a step-wise migration, similar to previous reports from family networks explaining Indigenous migration to major cities.

MIGRATION TO REGIONAL TOWNS

In a number of important service towns across regional Australia, Indigenous population growth has far outstripped non-Indigenous growth. As a consequence, the Indigenous share of population in these centres is rising. The long-run prospect for such places is towards an increasingly prominent Indigenous profile, given the differential population dynamics underway between Indigenous and non-Indigenous residents. This trend has major implications for the nature of services delivered in many of Australia's regional centres, as well as for the role that Indigenous residents will play in terms of their governance and economy.

The main dynamic leading to these divergent growth rates is differential net migration. Indigenous movers-in to these towns exceed movers-out at all ages with the biggest gap among younger adults aged 15–34 years. By contrast, non-Indigenous movers-out exceed movers-in, again at all ages with net losses peaking among young adults. In terms of origins, Indigenous migrants to regional towns form part of the general shift out of remote regions towards regional Australia and they are drawn from distinct catchment areas.

THE TORRES STRAIT DIASPORA

Up to World War II, Torres Strait Islanders were restricted by administrative arrangements to residing in the Torres Strait archipelago. Due to subsequent out-migration this distribution is now almost completely reversed. Today, 85 per cent of all Torres Strait Islanders are resident on the mainland. They are concentrated in the urban centres of north Queensland, as well as Brisbane and Sydney. By virtue of their original location in a single place, the term 'diaspora' has been used to describe this shift. This evokes the dispersal of ethnic groups and emphasises the importance of maintaining and utilising social networks between origin and destination areas. Rather than a move for settlement, from the point of view of diasporas, migration is more a transnational system of circulation, although for Torres Strait Islanders it represents internal rather than international mobility.

INDIGENISATION OF THE AGRICULTURAL ZONE: THE MURRAY-DARLING CASE

The same demographic trends leading to an enhanced Indigenous presence in many regional localities are also being played out at the broad regional scale across much of non-metropolitan Australia. Despite decline and dispersal over many decades across the Murray-Darling Basin, for example, Indigenous peoples form a sizeable and distinct component of the contemporary Basin population. As a consequence of differential migration, this presence is now being enhanced.

While the Indigenous population has been steadily increasing in all parts of the Basin, the non-Indigenous population has declined in many areas. The main reason for this contrast in growth rates is differential net migration. Overall, between 1996 and 2001, there was a net loss from the Basin of 31,000 non-Indigenous migrants while Indigenous net loss was only slight.

Of particular interest for social and economic policy is the age pattern of net migration. Both Indigenous and non-Indigenous populations experienced a loss of young people between the ages of 10–29. However, the movement out to the rest of Australia of non-Indigenous youth was almost five times the Indigenous rate. With no reciprocal movement back in later years this is leading to the prospect of progressive decline in the non-Indigenous population. Presently, at the broad sub-regional level, the Indigenous share of population varies substantially from less than 1 per cent in many parts of Victoria, between 1 and 5 per cent along the Murray and Murrumbidgee, to more than 8 per cent along the Darling and other northern river systems. However, as the scale of analysis is reduced further, particular parts of the Basin, and particular localities within it, are predominantly comprised of Indigenous people. For example, two-thirds of the town of Wilcannia is now Indigenous. This emergence of Indigenous towns, and the rising Indigenous presence more generally, is significant in terms of the demand for specialised government services and a need to establish a place for Indigenous participation in the regional economy.

REMOTE INDIGENOUS POPULATIONS: DISPERSAL TO OUTSTATIONS

Since the 1970s a distinct settlement pattern has emerged on Aboriginal lands involving the formation of numerous, dispersed, small, Indigenous communities, or outstations. This has accompanied the transfer of land back to Aboriginal ownership with the prospect of more to come via land purchase and native title claims. Most, if not all, of these communities required no modern economic base, nor have they subsequently acquired one, at least not in a manner beyond the combined provisions of a sizeable state sector, a limited private sector, and variable (though largely unquantified) customary economic activities. The term 'hybrid economy' has been coined to describe this structural arrangement.

Across remote areas, a total of 1,187 such communities were identified in 2001 with a total reported (service) population of almost 93,000. The vast majority (830, or 79%) were very small in size with less than 50 persons. Collectively, these very small places account for only 13,633 persons, or 17 per cent of the total in discrete communities. To place this in some perspective, almost 2,000,000 Australians currently reside in settlements of less than 200 persons. Only 3 per cent of these are Indigenous.

This raises the subject of whether remote locations represent advantage or disadvantage. Against mainstream measures of socioeconomic wellbeing, Indigenous people at outstations are clearly disadvantaged. To explain this, policy makers increasingly focus on constraints imposed by locational disadvantage. These are unequivocal. However, Indigenous human capital deficits are largely independent of location. Equally, there are lifestyle choices being made by Aboriginal people, choices that are legally enabled by the granting of land rights. Also, economic activity can be stimulated by outstation residence, though generally not in ways amenable to measurement by mainstream social indicators.

To the extent that the achievement of uniquely Indigenous (and national goals) may be attainable only by virtue of remote residence on traditional lands, the voluntary dispersion of population balances a range of cultural, economic, social and political considerations. While it reduces access to town-based mainstream

labour markets, opportunities for education, training and income generation, as well as to better housing and other social facilities, there are perceived social, cultural and economic gains acquired from outstation residence. Access to country and residence in clan-based groupings is considered an important element of Indigenous cultural life in many parts of remote Australia, and movement between townships and remote outstations is likely to endure.

REMOTE INDIGENOUS POPULATIONS: THE GROWTH OF INDIGENOUS TOWNS

At the end of the assimilationist years of welfare administration, Charles Rowley described the mission and government settlements across remote Australia as having been instrumental in frustrating urbanisation. In his view, they functioned as holding institutions serving to prevent the inevitable migration of Aboriginal people to towns and cities. With the benefit of more than 30 years hindsight during which time Indigenous people have been free from the institutional and legislative arrangements that governed their place of residence, this proposition is only partially upheld.

Many remote settlements have continued to grow in size and complexity with several achieving urban status within the ASGC. The current trajectory for these towns is continued high growth, in contrast to the fortunes of many more mainstream country towns. Thus, contrary to the outback experience of the past two decades which has seen many country towns facing decline, an emergent public policy issue in the remote Indigenous domain, especially in the Top End of Australia, is how to accommodate (often literally) urban growth.

A prime example is provided by the Council of Australian Governments' Indigenous Community Coordination Pilot trial site focused on the town of Wadeye in the Northern Territory. Since its inception in 1939, this town and its hinterland has grown steadily to reach a population of around 2,200. On current trends, it is estimated to reach 3,800 by 2023. By that time, it will constitute the Northern Territory's fourth largest town. Presently, the population at Wadeye suffers an acute housing and infrastructure shortfall. Unless a major upgrading occurs, Wadeye will be increasingly anomalous in the Australian settlement hierarchy for being a vibrant and growing small-sized country town yet missing significant elements of basic infrastructure and services normally associated with such places. While the same detailed analysis has not been undertaken, it is likely that the situation at Wadeye is representative of the situation found in similar Indigenous towns.

REMOTE INDIGENOUS POPULATIONS: LABOUR DEMAND AND SUPPLY

Indigenous people are relatively disengaged from mainstream labour markets in remote areas. Reasons for this are varied, but interlinked. Many employment sites are sporadically located over vast distances and Indigenous propensity to migrate in search of employment is low (in contrast to non-Indigenous labour); this is low partly because individuals lack necessary skills and work experience. People lack these skills partly due to low participation in formal schooling, though evidence is available to suggest that the resources necessary to provide for the educational needs of remote school age populations are not forthcoming. In any event, crowded and ill-equipped living conditions perpetuate high morbidity, disability, and custody rates all

of which detract from engagement capacity. At the same time, some Indigenous people simply prefer other, more customary, life styles.

Nor do relatively buoyant economic conditions necessarily guarantee that things might be any different. During the 1990s, the Northern Territory economy out-performed the rest of Australia and employment rose at an average annual rate of 5.8 per cent, yet Indigenous mainstream employment fell. While a number of initiatives are underway to change this situation, the adequacy of these must be assessed against regional demographics and labour supply conditions.

The example of ADM highlights that even where industry does make concerted and successful efforts to engage local Indigenous labour in remote regions, the enormity of the task to accommodate a growing population means that impacts on regional social indicators will be minimal at best. A related question concerns the capacity of local labour supply to match demand.

The recent study of Indigenous labour force participation in mining activity in the Pilbara indicates that, in pursuit of a social licence to operate, mining corporations are active in engaging Indigenous workers. However, the capacity of local Indigenous people to benefit remains substantially constrained by their limited human capital and many in the Indigenous population will continue to experience structural disadvantage in the absence of substantially enhanced intervention to redress historic exclusion. If current employment targets by mining companies were to be achieved, the additional jobs created would suffice only to keep pace with the growth in Indigenous working-age population. Thus, while much might be accomplished in terms of enhanced Indigenous engagement, little might be discernable in terms of overall regional economic status with a large component of the population remaining detached from mainstream opportunities.

POLICY IMPLICATIONS

Emergent Indigenous demographic trends are spatially aligned with particular categories of place that transcend state and territory boundaries and many other areal configurations. They coalesce around particular structural settings (city suburbs, regional towns, town camps, remote Indigenous towns, outstations) as opposed to what has tended to guide Indigenous policy formulation in recent times, which has been a changing set of regionalised conceptions. At best, these latter have facilitated Indigenous political participation, at worst they have obfuscated the very different constraints and opportunities for social and economic participation that face Indigenous people and policy makers as they attempt to improve well-being in different residential environments. Interestingly, this interpretation of the findings from this overview of emergent demographic trends is remarkable for its agreement (in terms of residential categorisation) with the early attempts by the Commonwealth Department of Aboriginal Affairs to make sense of the diverse social and economic circumstances facing Indigenous people as a consequence of the differential impacts imposed by European settlement (Altman & Sanders 1991).

The overriding implication for policy is that whole-of-government approaches need to consolidate around these structural settings in order to provide a clear national statement and approach to policy—for each category of place—for outstations, for town camps, for growing remote Indigenous towns, for regional country centres, and for poor city neighbourhoods—and that policy directions in regard to these categories involve close collaboration across and between all levels of government. Failure to recognise the implications of demographic trends in these settings may be significant not only in terms of Indigenous well-being but also for social cohesion and a compounding of existing high levels of disadvantage, with resultant high downstream costs to governments in addressing the consequences.

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